

**BHP BILLITON IRON ORE**

**SUBMISSION TO THE  
NATIONAL COMPETITION COUNCIL**

**APPLICATION FOR DECLARATION  
OF A SERVICE PROVIDED BY THE  
GOLDSWORTHY RAILWAY LINE**

**30 April 2008**



## DEFINITIONS

The following definitions are used in this submission:

DEFINED TERM	DESCRIPTION
<b>Applicant</b>	The Pilbara Infrastructure Pty Ltd, a wholly owned subsidiary of Fortescue Metals Group Limited
<b>ACCC</b>	Australian Competition and Consumer Commission
<b>BHPBIO</b>	BHP Billiton Iron Ore Pty Ltd
<b>BHPBM</b>	BHP Billiton Minerals Pty Ltd
<b>Chichester Railway Line</b>	The railway line owned by TPI which runs from Fortescue's Cloud Break mine in the Chichester Ranges to TPI's port facilities at Anderson Point (as described in paragraph 2.3 of the Goldsworthy Application)
<b>Chichester Ranges projects</b>	Fortescue's iron ore projects in the Chichester Ranges area of the Pilbara
<b>Council</b>	National Competition Council
<b>Finucane Island section</b>	The section of the Goldsworthy Railway Line which runs from the Goldsworthy Junction to port facilities at Finucane Island
<b>Fortescue</b>	Fortescue Metals Group Limited
<b>Gans Report</b>	Attachment C to the Goldsworthy Supplementary Submission - a report by Professor Joshua Gans entitled "The Evaluation of Criterion (b) in Long-Haul Rail Services" dated 19 December 2007
<b>Goldsworthy Application</b>	The Application by TPI under Part IIIA of the <i>Trade Practices Act 1974</i> for declaration of the service provided by the Goldsworthy Railway Line, dated 16 November 2007
<b>Goldsworthy Junction</b>	The area of intersection between the Goldsworthy Railway Line and the Mt Newman Railway Line
<b>Goldsworthy JV</b>	The joint venture comprising BHPBM (85%), Mitsui Iron Ore Corporation Pty Ltd (7%) and ITOCHU Minerals and Energy of Australia Pty Ltd (8%)
<b>Goldsworthy Railway Line</b>	The railway line owned by the Goldsworthy JV which runs from the Yarrie rail head to port facilities at Finucane Island in Port Hedland
<b>Goldsworthy Service</b>	The use of the Goldsworthy Railway Line from a location near Yarrie to a location near Finucane Island and all points in between, as described in paragraph 3.2 of the Goldsworthy Application
<b>Goldsworthy Supplementary Submission</b>	Supplementary Submission lodged by TPI in relation to the Goldsworthy Application, dated 18 January 2008
<b>Hamersley Supplementary Submission</b>	Supplementary Submission lodged by TPI in relation to the Application under Part IIIA of the TPA for declaration of the service provided by Hamersley Iron Pty Ltd's Pilbara Rail Network, dated 18 January 2008

DEFINED TERM	DESCRIPTION
<b>Hilmer Report</b>	Independent Committee of Inquiry into National Competition Policy Review, 1993, <i>National Competition Policy: Report by the Independent Committee of Inquiry (Hilmer Report)</i> , AGPS, Canberra
<b>Kennedy Railway Line</b>	The railway line proposed to be constructed by the Applicant from Fortescue's Eliwana deposit in the Pilbara to the Chichester Railway Line
<b>Mindy Mindy prospect</b>	PIO's possible iron ore project in the Mindy Mindy area of the Pilbara
<b>Mt Newman Application</b>	Application by Fortescue under Part IIIA of the <i>Trade Practices Act 1974</i> for declaration of the service provided by Mt Newman Railway Line, dated 11 June 2004
<b>Mt Newman Final Recommendation</b>	The Final Recommendation of the Council in relation to the Newman Application dated 23 March 2006
<b>Mt Newman JV</b>	A joint venture between BHPBM (85%), Mitsui-Itochu Iron Pty Ltd (10%) and ITOCHU Minerals and Energy of Australia Pty Ltd (5%)
<b>Mt Newman Railway Line</b>	The railway line owned by the Mt Newman JV which runs from the Mt Whaleback rail head to port facilities at Nelson Point in Port Hedland
<b>Mt Newman Service</b>	The use of the Mt Newman Railway Line from a point in the vicinity of Mindy Mindy to port facilities at Nelson Point in Port Hedland
<b>NCC Guide</b>	National Competition Council, <i>The National Access Regime: A Guide to Part IIIA of the Trade Practices Act 1974</i> , dated December 2002
<b>PHPA</b>	Port Hedland Port Authority
<b>PIO</b>	Pilbara Iron Ore Pty Ltd, a 50/50 joint venture between Fortescue and Palmary
<b>Robe River Application</b>	Application by TPI under Part IIIA of the TPA for declaration of the service provided by the Robe River Joint Venturers' Pilbara Railway, dated 18 January 2008
<b>RTA</b>	The <i>Rail Transport Agreement 1987</i> , between the Western Australian Government and the Mt Newman JV
<b>RTIO</b>	Rio Tinto Iron Ore, a division of Rio Tinto Limited
<b>Solomon project</b>	Proposed Fortescue iron ore project in the central Pilbara region
<b>Sydney Airport</b>	<i>Re Sydney Airports Corporation Ltd</i> (2000) 156 FLR 10
<b>TPA</b>	<i>Trade Practices Act 1974</i> (Cth)
<b>TPI</b>	The Pilbara Infrastructure Pty Ltd, a wholly owned subsidiary of Fortescue
<b>TPI State Agreement</b>	<i>Railway and Port (The Pilbara Infrastructure Pty Ltd) Agreement</i> ratified on 26 November 2004 by the <i>Railway and Port (The Pilbara Infrastructure Pty Ltd) Agreement Act 2004</i>

DEFINED TERM	DESCRIPTION
<b>Tribunal</b>	Australian Competition Tribunal
<b>Tribunal proceedings</b>	<i>Re: Application for review of the deemed decision by the Commonwealth Treasurer of 23 May 2006 under section 44H(9) of the Trade Practices Act 1974 (Cth) in relation to the application for declaration of services provided by the Mount Newman Railway Line, by Fortescue Metals Group Limited, in the Australian Competition Tribunal, File No 5 of 2006</i>
<b>Yarrie section</b>	The section of the Goldsworthy Railway Line which runs from Yarrie to the Goldsworthy Junction

The following companies which own or have interests in projects or prospects in the Pilbara are referred to in this submission:

DEFINED TERM	DESCRIPTION
<b>API</b>	Australian Premium Iron Joint Venture (a 50/50 joint venture between Aquila and American Metals and Coal Industries)
<b>Aquila</b>	Aquila Resources Limited
<b>BC Iron</b>	BC Iron Limited
<b>Brockman</b>	Brockman Resources Limited
<b>ConsMin</b>	Consolidated Minerals Limited (acquired by Palmary and delisted in January 2008)
<b>FerrAus</b>	FerrAus Limited
<b>Gindalbie</b>	Gindalbie Metals Limited
<b>Golden West</b>	Golden West Resources Limited
<b>Jupiter Mines</b>	Jupiter Mines Limited
<b>Midwest</b>	Midwest Corporation Limited
<b>Mt Gibson</b>	Mount Gibson Iron Limited
<b>Murchison</b>	Murchison Metals Limited
<b>Oakajee Port &amp; Rail</b>	Oakajee Port & Rail Pty Limited
<b>Palmary</b>	Palmary Enterprises (Australia) Pty Limited (which acquired ConsMin in January 2008)
<b>Polaris</b>	Polaris Metals NL
<b>Red Hill Iron</b>	Red Hill Iron Limited

## **SECTION A : EXECUTIVE SUMMARY**

### **1. BACKGROUND**

#### **The Application**

- 1.1 The Applicant seeks declaration under Part IIIA of the TPA of services involving use of the Goldsworthy Railway Line.
- 1.2 BHPBIO maintains that the Goldsworthy Service includes the use of a production process within the meaning of the definition of "service" in s44B of the TPA and that, accordingly, the Goldsworthy Railway Line is exempt from declaration under Part IIIA.
- 1.3 Special leave to appeal to the High Court of Australia in relation to the interpretation of the "production process" exclusion in Part IIIA and its application to services provided by the Goldsworthy Railway Line and the Mt Newman Railway Line was granted on 7 March 2008. The matter is expected to be listed for hearing in July 2008.

#### **Declaration criteria**

- 1.4 The Council cannot recommend declaration of the Goldsworthy Service unless it is satisfied that certain criteria are met, including the following:
- (a) that access would not be contrary to the public interest;
  - (b) that it would be uneconomical to develop another facility to provide the service;  
and
  - (c) that access to the Goldsworthy Service would promote a material increase in competition in a relevant market.

#### **Other considerations**

- 1.5 The Council must also have regard to the following matters in making its recommendation:
- (a) the objects of Part IIIA, namely, "to promote the economically efficient operation of, use of and investment in the infrastructure by which services are provided, thereby promoting effective competition in upstream and downstream markets"; and
  - (b) whether it would be economical to develop another facility that could provide part of the service.

### **2. RELEVANT FACTS**

#### **Integrated mine, rail and port system**

- 2.1 BHPBIO operates an integrated and interdependent mine, rail and port system under unified control for the production and supply of iron ore to the global market.
- 2.2 The Goldsworthy Railway Line is an integral part of the iron ore production and export system.
- 2.3 In order to optimise the capability of BHPBIO's production and export system, each of the mine, rail and port operations is undertaken in a manner that has regard to the impact of each operation on each of the other operations, and on the system as a whole, rather than focussing on maximising the throughput of any individual operation in isolation.

- 2.4 BHPBIO's ability to manage effectively the variability faced by its integrated production system is ultimately dependent on BHPBIO being able to respond with flexibility to actual events as they occur through adjustments to the scheduling of its operations.

#### **Goldsworthy Railway Line**

- 2.5 The Goldsworthy Railway Line is a single track line with a small number of sidings that runs from the Goldsworthy mining area to BHPBIO's port facilities at Finucane Island in Port Hedland, a distance of approximately 210km.
- 2.6 The operation of the Goldsworthy Railway Line is effectively divided into two sections: the Yarrie section and the Finucane Island section.

#### ***Yarrie section***

- 2.7 The Yarrie section is in relatively poor condition due to a number of factors including the use of second-hand timber sleepers and original condition rail and bridges. Trains operating on the Yarrie section are severely restricted in terms of their axle loads, the weight of ore that can be carried in ore cars and their speed.
- 2.8 In light of the above, it is likely that the Yarrie section would be able to accommodate about 8mtpa for some years. However, it is unlikely that any material increase in tonnage could be accommodated on the Yarrie section for an extended period given its condition.
- 2.9 There will be a point at which it will not be possible to increase tonnage without effectively having to replace the entire Yarrie section.

#### ***Finucane Island section***

- 2.10 The Finucane Island section is a single track line that is effectively used as a queuing yard for BHPBIO's unloading operations at Finucane Island.
- 2.11 This means that trains operating on the Finucane Island section are often stationary, thereby occupying the railway line and prohibiting the movement of any other trains through the Finucane Island section.
- 2.12 BHPBIO is currently using all of the capacity on the Finucane Island section and will use all of the capacity for the foreseeable future.
- 2.13 There are significant impediments to double tracking the Finucane Island section and BHPBIO does not currently propose to double track the Finucane Island section.

#### **The Applicant**

- 2.14 The Applicant seeks access to the Goldsworthy Railway Line so that it can run its own trains on that railway line. In this regard, while the Applicant has identified five projects and prospects to which it would like to offer rail haulage, it does not own or have any interests in any of those projects or prospects.

### **3. ACCESS WOULD BE CONTRARY TO THE PUBLIC INTEREST – CRITERION (f)**

#### **Costs arising from access**

- 3.1 There are substantial costs and diseconomies that would result from third party access to the Goldsworthy Railway Line.
- 3.2 Most significantly, as detailed in the Report entitled "Regulation for the Future of Australia's Natural Resources Sector" dated April 2008, which is **Annexure 1**, third party access would:

- (a) have an adverse impact on Australia's global competitiveness in resources during a time of high demand;
  - (b) introduce economic inefficiencies in the operation and use of, and investment in, export infrastructure; and
  - (c) reduce social surplus for Australia.
- 3.3 There is a wealth of evidence that production and logistics systems which are integrated single-user systems under unified control are markedly more efficient than multi-user systems. Most notably, 10 to 20% additional capacity is required to achieve the same level of throughput in a multi-user system as can be achieved in a single-user system. The cost of installing such additional capacity would be in the order of billions of dollars.
- 3.4 Further, third party access to the railway lines would result in the following costs and diseconomies:
- (a) loss of export revenue through delays to investment in expansion of BHPBIO's production and export system. The opportunity cost to BHPBIO alone of delays to investment caused by access would be **in excess of \$4.6 billion**. To this figure must be added societal costs of loss of royalties, taxation and employment opportunities;
  - (b) loss of export revenue due to delays in introducing innovation and new technology and operating practices to BHPBIO's production and export system;
  - (c) substantial direct costs of co-ordination, administration and regulatory processes associated with third party access;
  - (d) the opportunity costs of the diversion of senior personnel to attending to co-ordination, administration and regulatory processes associated with third party access; and
  - (e) opportunity costs of forgone facilities-based competition.

#### **Benefits arising from access**

- 3.5 The potential benefits that might accrue from third party access to the Goldsworthy Railway Line are small and in any event unlikely to be realised.
- 3.6 To the extent that such benefits might be realised, their quantifiable impact on the Australian public is likely to be trivial and will almost certainly be outweighed by the potential costs and diseconomies of third party access.
- 3.7 Any benefits accruing from third party access to the Goldsworthy Railway Line will be trivial because:
- (a) the amounts of ore that might be produced from third parties using the Goldsworthy Railway Line would total **less than 1%** of the global iron ore market;
  - (b) the Mindy Mindy prospect is not economically viable and in any case does not require access to the Goldsworthy Railway Line to be developed and exploited;
  - (c) of the five projects and prospects identified by the Applicant as requiring rail access, three are entirely speculative, one (for manganese) has been operating for 10 years using road haulage and one proposes to use road haulage – that is, none require access to the Goldsworthy Railway Line to be developed and exploited;

- (d) there is no evidence that any third party project requires access to the Goldsworthy Railway Line to be developed and exploited; and
- (e) transportation of ore by road to port facilities at Port Hedland is economically viable for third party projects in the vicinity of the Goldsworthy Railway Line.

**Access would be contrary to the public interest and the objects of Part IIIA**

3.8 For the reasons set out above, declaration of the use of the Goldsworthy Railway Line would be contrary to the public interest and the objects of Part IIIA.

**4. ECONOMICAL TO DEVELOP ANOTHER FACILITY – CRITERION (b)**

4.1 The Council cannot be satisfied that it is uneconomical for anyone to develop another facility to provide the same service as the Goldsworthy Service because:

- (a) it is economically feasible for the projects and possible projects located near the Goldsworthy Railway Line to transport their ore to port facilities by road;
- (b) there is no spare capacity on the Finucane Island section of the Goldsworthy Railway Line and there will not be any spare capacity in the foreseeable future;
- (c) BHPBIO has no plans to double track the Finucane Island section of the Goldsworthy Railway Line and there are significant impediments to double tracking that section; and
- (d) development of a Goldsworthy Junction to Anderson Point section, as an alternative facility, is physically feasible and no more expensive in terms of capital costs than double tracking the Finucane Island section (if it were possible).

4.2 Further, for the reasons set out in the submission and mentioned above in relation to criterion (f), the other 'social' costs and diseconomies of third party access to the Goldsworthy Railway Line overwhelmingly favour the development of another facility.

**5. NO MATERIAL INCREASE IN COMPETITION – CRITERION (a)**

5.1 For the reasons set out above, the Council cannot be satisfied that access to the Goldsworthy Railway Line will promote a material increase in competition in any dependent market.

## **SECTION B : INTRODUCTION**

### **6. BACKGROUND**

#### **The Application**

6.1 The Applicant seeks declaration of the Goldsworthy Service.<sup>1</sup>

6.2 The Goldsworthy Service is described in the Goldsworthy Application as:

*" . . . the use of the facility comprising the Goldsworthy Railway from a location near Yarrie, at one end, to a location near Finucane Island within the port of Port Hedland, at the other end, and all points in between . . ."*<sup>2</sup>

6.3 The Goldsworthy Application also provides that:

*"The Goldsworthy Service would also include the use of all associated infrastructure necessary to allow third party trains and rolling stock to move along the Goldsworthy Railway between points of interconnection, including, but not limited to:*

- (1) railway track, associated track structures, over or under track structures, supports (including supports for equipment or items associated with the use of the railway);*
- (2) bridges;*
- (3) passing loops;*
- (4) train control systems, signalling systems and communication systems;*
- (5) sidings and refuges to park rolling stock;*
- (6) maintenance and protection systems; and*
- (7) roads and other facilities which provide access to the railway line route.*<sup>16</sup>

#### **Ownership and management**

6.4 The Goldsworthy Railway Line is owned by the Goldsworthy JV and is managed by BHPBIO on behalf of the Goldsworthy JV.

#### **Use of a production process**

6.5 BHPBIO operates an integrated mine, rail and port system for the production and export of iron ore from the Pilbara. The Goldsworthy Railway Line is an integral part of that system.

6.6 The Goldsworthy Service includes the use of a production process within the meaning of the definition of "service" in s44B of the TPA and is accordingly exempt from declaration under Part IIIA of the TPA.

6.7 Special leave to appeal to the High Court of Australia in relation to the interpretation of the "production process" exclusion in Part IIIA and its application to the Goldsworthy Service

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<sup>1</sup> Neither TPI nor BHPBIO is aware of any other party who seeks track access in relation to the Goldsworthy Railway Line (Goldsworthy Supplementary Submission, para 5.13).

<sup>2</sup> Goldsworthy Application, para 3.2.

<sup>3</sup> Goldsworthy Application, para 3.3.

and the Mt Newman Service was granted on 7 March 2008. The matter is expected to be heard in July 2008.

#### **Associated infrastructure**

6.8 A number of the items of associated infrastructure identified by TPI in the Goldsworthy Application are:

- (a) not owned by the same entities that own the Goldsworthy Railway Line;
- (b) not physically part of, or "associated" with, the Goldsworthy Railway Line; and
- (c) not, in fact, located near the Goldsworthy Railway Line.

6.9 For example:

- (a) the train control room and systems referred to in the Goldsworthy Application are part of the Mt Newman facility and are located in a building at Nelson Point, approximately 10km from the Goldsworthy Railway Line;
- (b) the signalling and communications systems referred to in the Goldsworthy Application are part of the Mt Newman facility and are located in a building at Nelson Point, approximately 10km from the Goldsworthy Railway Line;
- (c) the maintenance equipment referred to in the Goldsworthy Application is part of the Mt Newman facility and is located in two areas. The maintenance equipment is located at Nelson Point, approximately 10km from the Goldsworthy Railway Line and the welding equipment is located at Bing siding on the Mt Newman Railway Line, approximately 2km from the Goldsworthy Railway Line;
- (d) the ballast quarry which is used to maintain the Mt Newman Railway Line and the Goldsworthy Railway Line is located on the Shaw siding on the Mt Newman Railway Line, approximately 200km from the Goldsworthy Railway Line. It is not part of either the Mt Newman Railway Line or the Goldsworthy Railway Line; and
- (e) the Goldsworthy Junction crossover to which TPI seeks access includes approximately 100m of railway track that is part of the Mt Newman Railway Line rather than the Goldsworthy Railway Line.

#### **Minimum bundle of assets**

6.10 The Goldsworthy Application and the Goldsworthy Supplementary Submission do not identify the "minimum bundle of assets" necessary for use of the Goldsworthy Service.<sup>4</sup>

6.11 Instead, the Applicant has identified a number of items of infrastructure, some of which:

- (a) are not necessary for use of the Goldsworthy Service;
- (b) do not require physical access for use of the Goldsworthy Service;
- (c) are not owned by the same entities that own the Goldsworthy Railway Line; and
- (d) are not in fact physically part of, or "associated" with, the Goldsworthy Railway Line.

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<sup>4</sup> For the purposes of Part IIIA of the TPA, a facility is "a physical asset (or set of assets) essential for service provision" (*Sydney Airports*, para 82). The relevant facility is therefore comprised of "the minimum bundle of assets required to provide the relevant services subject to declaration" (*Sydney Airports*, para 192; NCC Guide Part B, para 3.36).

- 6.12 In these circumstances, even if the Council determines that all of the declaration criteria under s44G(2) of the TPA are met, it can do no more than recommend declaration of the minimum bundle of assets required for use of the Goldsworthy Service.

**Objects of Part IIIA**

- 6.13 Under s44F(2)(b) of the TPA, the Council must have regard to the objects of Part IIIA before it makes a recommendation about the Goldsworthy Service.

- 6.14 The objects of Part IIIA are:

- (a) to promote the economically efficient operation of, use of and investment in the infrastructure by which services are provided, thereby promoting effective competition in upstream and downstream markets; and
- (b) to provide a framework and guiding principles to encourage a consistent approach to access regulation in each industry.<sup>5</sup>

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<sup>5</sup> Section 44AA of the TPA.

## **SECTION C : FACTUAL CONTEXT**

### **7. BHPBIO'S INTEGRATED PRODUCTION AND EXPORT SYSTEM**

7.1 The Goldsworthy Railway Line is a part of an integrated iron ore production and export system managed and operated by BHPBIO.

#### **Mining operations**

##### **Overview**

7.2 The iron ore extracted by BHPBIO from its mines in the Pilbara has:

- (a) different chemical properties (that is, different levels of iron and impurities, the main examples of which are alumina, silica and phosphorus);
- (b) different geological characteristics (that is, different mineral types such as hematite or martite-goethite, different levels of free and included moisture and different geotypes of a particular mineral type); and
- (c) different physical properties (such as particle size, which is the distinction between iron ore in lump and fines forms).

7.3 These variations in the properties of ore can occur within specific ore bodies in a mine as well as between different mines.

7.4 BHPBIO determines the chemical and physical parameters of the products that it will produce for sale having regard to:

- (a) the requirements of its customers;
- (b) the anticipated life of its mine resources; and
- (c) the grade of ore available from those mines.

7.5 BHPBIO blends iron ore that it mines in order to ensure consistent finished iron ore products and also to maximise the life of the overall resources being managed by BHPBIO. Accordingly, it is beneficial from both economic and commercial perspectives for BHPBIO to blend ores from different pits, mines and mining areas to produce finished iron ore products. This provides BHPBIO with a significant economy of scale.

7.6 BHPBIO currently produces for sale six finished iron ore products from its Pilbara operations. Those products are:

- (a) Newman High Grade Lump;
- (b) Newman High Grade Fines;
- (c) Yandi Lump;
- (d) Yandi Fines;
- (e) MAC<sup>™</sup> Lump; and
- (f) MAC<sup>™</sup> Fines.

7.7 Each of BHPBIO's finished iron ore products has specific chemical and physical properties and is produced from ore which is sourced from different mines or pits located in different mining areas.

7.8 Lump and fines are particular categories of product based on the size of the iron ore particles in the product. Fines comprises ore with particles of up to approximately 6.3mm in diameter<sup>6</sup> and lump comprises ore with particles of between approximately 6.3mm and 31.5mm in diameter. Ore must undergo crushing and screening processes at various points in BHPBIO's production process to attain these final product sizes.

7.9 For the year ended 30 June 2007, BHPBIO produced approximately 107.8mt of iron ore from its Pilbara operations.<sup>7</sup>

***Goldsworthy mining area***

7.10 The Goldsworthy mining area comprises mines and pits in and around Yarrie and Nimingarra.

7.11 Ore from the Goldsworthy mining area can be unloaded at either Nelson Point or Finucane Island. It is expected that, from about early May 2008, more than 50% of ore from the Goldsworthy mining area will be unloaded at Nelson Point while the remainder will be unloaded at Finucane Island. However, given that mining plans and customer requirements can change, the date and percentage may also vary.

***Newman, Yandi and Area C mining areas***

7.12 The Newman mining area presently comprises mines known as Mt Whaleback, Orebodies 29 and 30, Orebodies 23 and 25, Jimblebar and Orebody 18. Newman High Grade Lump and Newman High Grade Fines are blends of ore from the mines in the Newman mining area and from time to time, ore from mines in the Goldsworthy mining area.

7.13 Yandi Lump and Yandi Fines are blends of ore from the mines or pits located within the Yandi mining area. MAC<sup>TM</sup> Lump and MAC<sup>TM</sup> Fines products are produced from ore sourced from mines or pits located in the Area C mining area.

***Rail operations***

7.14 The Goldsworthy Railway Line comprises a single track standard gauge railway line from the Yarrie rail head to Finucane Island at Port Hedland, a distance of approximately 210km.

7.15 The Mt Newman Railway Line comprises a single track standard gauge heavy haulage railway line from the Mt Whaleback mine in the Newman mining area to Nelson Point at Port Hedland, a distance of approximately 426km.

7.16 The Goldsworthy Railway Line and Mt Newman Railway Line intersect at the Goldsworthy Junction, approximately 10km south of Port Hedland.

7.17 Trains on the Goldsworthy Railway Line and the Mt Newman Railway Line carry ore as follows:

- (a) ore from the Goldsworthy mining area is carried on:
  - (i) the Goldsworthy Railway Line until the Goldsworthy Junction and then along the Mt Newman Railway Line to Nelson Point for unloading; or
  - (ii) the Goldsworthy Railway Line until the Goldsworthy Junction, then along the relatively short section of the Mt Newman Railway Line which is part of

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<sup>6</sup> Yandi fines however can be up to 9.5 mm.

<sup>7</sup> BHP Billiton Limited, Annual Report 2007, p46. This figure includes iron ore from BHPBIO's Mt Newman, Jimblebar, Mt Goldsworthy, Area C and Yandi mining operations and is measured in wet tonnes.

the Goldsworthy Junction and then along the remainder of the Goldsworthy Railway Line to Finucane Island for unloading.

- (b) ore from the Newman mining area is carried on the Mt Newman Railway Line and is unloaded at Nelson Point; and
- (c) ore from the Yandi and Area C mining areas is either:
  - (i) carried along the Mt Newman Railway Line to Nelson Point for unloading (with a proportion of this ore being transferred to Finucane Island via the under harbour tunnel); or
  - (ii) carried along the Mt Newman Railway Line until the Goldsworthy Junction and then along the Goldsworthy Railway Line to Finucane Island for unloading.

7.18 As the Goldsworthy Railway Line is a single track railway and the Mt Newman Railway Line is predominantly a single track railway, trains travel between mine and port and back along the same track. Accordingly, trains travelling from mine to port "meet" trains travelling from port to mine. To enable trains to pass each other, one of the trains must enter a siding or passing loop and wait for the other train to pass before continuing its journey.

#### **Port operation**

7.19 BHPBIO operates port facilities at two locations which are on opposite sides of Port Hedland harbour - Nelson Point and Finucane Island. These facilities are connected by a 1.4 km conveyor which runs through a tunnel under the harbour.

#### ***Nelson Point***

7.20 Ore from the Goldsworthy, Newman, Yandi and Area C mining areas is currently unloaded from trains (using the Mt Newman Railway Line) at Nelson Point into one of three car dumpers. At Nelson Point, there are two crushing and screening plants, two stockyards (North and South yards) comprising six stackers and four reclaimers, and one lump re-screening plant. The facilities at Nelson Point are serviced by two ship loaders.

#### ***Finucane Island***

7.21 At Finucane Island there is one car dumper, two stockyards (West and East yards) serviced by three stackers and two reclaimers, and one lump re-screening plant. On Finucane Island, ore from the Goldsworthy, Yandi and Area C mining areas is received either:

- (a) via the under harbour conveyor from Nelson Point; or
- (b) from car dumper 4, having been railed to Finucane Island from the Goldsworthy, Yandi or Area C mining areas.

#### ***Stockpiling and blending***

7.22 The majority of iron ore produced by BHPBIO is stockpiled at the port facilities. A relatively small proportion of ore from Goldsworthy, Yandi and Area C is sent direct to ship. This ore undergoes inherent blending in the process of mining, railing and shipping.

7.23 BHPBIO has traditionally "built" its port stockpiles according to a process known as "chevron ply". This process is designed to produce "slices" of ore that are of uniform grade in the stockpile during reclaiming.

- 7.24 BHPBIO has recently introduced a new stacking method at the port, known as cone refill stacking or LIFO (an acronym for "last in first out"). This method does not require a stockpile to be completely built prior to reclaiming but operates in the following manner:
- (a) ore is reclaimed from stockpiles in "bench" segments; and
  - (b) ore is then "refilled" into the most recently reclaimed segments of the stockpile.
- 7.25 LIFO stacking can only be used for ore that is on-grade, or near on-grade, as it does not involve the thorough blending that otherwise occurs through the chevron ply approach. Therefore, the LIFO stacking approach is only used for ore from Area C – which is blended at the mine – and Yandi, which is mined so as to avoid the necessity for chevron ply blending at the port.
- 7.26 Newman ore, and the Goldsworthy ore that is stacked with it, continues to be stockpiled at the port using the chevron ply approach.
- 7.27 Lump products, including lump that is sent direct to ship, must be re-screened at the port because the lump products suffer physical degradation from the handling process between mine and the port stockpile. The fines that are removed from the lump are blended with the other fines product in order to improve the grade of the fines.

### ***Shipping***

- 7.28 Approximately 800 ships are currently loaded each year by BHPBIO. The largest ships carry up to 225,000 tonnes of iron ore.
- 7.29 Demand for particular products can vary significantly at any particular point in time, given the relatively random pattern of ship arrivals. This variability in demand for particular products directly impacts upon port stockpiling and reclaiming operations. However, given the integrated nature of BHPBIO's production and export system, this variability also affects BHPBIO's other operations. For example, if there is a sudden short term increase in demand for a particular product, it may be necessary to adjust the sequence of rail operations to respond to this increase in demand.
- 7.30 The Port of Port Hedland is a tidal constrained harbour, meaning that deep drafted ships loaded at BHPBIO operated berths can only depart the harbour through the shipping channel within very specific and limited "sailing windows" that open for a short time period - three hours prior to high water on mean high water springs. There are generally two tides a day (but for 24 days in every year, on which there is only one tide). Each tide, however, cannot always be used due to weather issues (for example, cyclones) or maintenance program issues. Consequently, there are only about 660 available sailing windows each year.
- 7.31 The gross loading rates at BHPBIO operated berths are such that average size vessels will generally sail on the third tide after they are berthed.
- 7.32 BHPBIO's shipping operations are also constrained by the fact that incoming and outgoing vessels cannot pass each other in the shipping channel (as it is too narrow). This constraint means that all of the loaded vessels departing on a particular sailing window must have passed the point at which incoming vessels enter the shipping channel before these incoming vessels can be brought in for loading.

### **Interdependent nature of operations**

- 7.33 BHPBIO's production system, involving its mine, rail and port operations, is highly integrated and interdependent and is under unified control.

- 7.34 Consequently, it is not appropriate to attempt to assess the capability and performance of each of BHPBIO's operations in isolation. Rather, in making such an assessment, it is necessary to have regard to the impact of the interaction of each operation on each of the other operations and on the system as a whole. For example, the capability of BHPBIO's production system at any particular point in time cannot be greater than the most constrained component of that system, and the dynamic nature of the system means that the location of the constraint will constantly vary.
- 7.35 Therefore, in order to optimise the capability of BHPBIO's production system, it is vital that each of the mine, rail and port operations is undertaken in a manner that has regard to the impact of each operation on each of the other operations, and on the system as a whole, rather than focussing on maximising the throughput of any individual operation in isolation.
- 7.36 The key challenge faced by BHPBIO in managing its integrated production system is dealing with the impact of variability on each of its operations. This variability arises from a number of factors, including:
- (a) as discussed above, variability in the demand for particular products at particular points in time;
  - (b) different operational requirements at each of the mining areas (stockpile capacity, loading constraints and daily production levels differ across mines);
  - (c) variability in the performance of, and interaction between, the various elements of BHPBIO's production system; and
  - (d) unplanned outages across BHPBIO's production system, such as equipment failures and materials handling issues.
- 7.37 BHPBIO undertakes long and medium term planning processes to seek to minimise the level of variability of those factors that are within its control, and to mitigate the effect of variability that is anticipated to have an impact on the system. However, the impact of these factors on BHPBIO's system is ultimately determined by actual events, which cannot be predicted with certainty before they occur, and BHPBIO's responses to such events.
- 7.38 Therefore, BHPBIO's ability to manage effectively the variability faced by its integrated production system is ultimately dependent on BHPBIO being able to respond with flexibility to actual events as they occur through adjustments to the scheduling of its operations.
- 7.39 To this end, BHPBIO created the Integrated Planning group to improve co-ordination between each of the operational and functional groups, and to seek to ensure that each of these operations function in the most efficient manner in the context of the system as a whole.
- 7.40 BHPBIO has continuously developed and refined its railway operating methodology to adapt to infrastructural, technical and operational developments. In other words, as aspects of BHPBIO's production system have changed, such as the shifting requirements of different mine sites and mining areas, expanded system capacity, the introduction of new technology and different railway operating approaches (such as the reintroduction of 3 rake<sup>8</sup> trains), BHPBIO has adjusted the manner in which it operates its railway system.
- 7.41 Overall BHPBIO seeks to operate its railway system in a highly flexible manner to maximise overall system performance rather than the efficiency of any one operation alone.

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<sup>8</sup> BHPBIO assembles trains by coupling a fixed number of ore cars to a set of locomotives. Each set of ore cars is called a "rake" which generally comprises about 110 ore cars.

### Global market for iron ore

7.42 BHPBIO operates its integrated mine, rail and port system to compete in the global market for the production and supply of iron ore. In 2007, global iron ore production was estimated to be 1.6 billion tonnes with Australian production estimated to be 288 million tonnes.<sup>9</sup> Consultants to the PHPA estimate that by 2025, iron ore production from the Pilbara will range from approximately 550 mtpa to 900 mtpa.<sup>10</sup> The Council has previously found (and BHPBIO agrees) that the market for iron ore is effectively competitive.<sup>11</sup> There is nothing in the Goldsworthy Application, the Goldsworthy Supplementary Submission or otherwise to change this finding.

## 8. THE FACILITY – GOLDSWORTHY RAILWAY LINE

### Overview

- 8.1 The Applicant has displayed very limited knowledge of the condition and operation of the Goldsworthy Railway Line.
- 8.2 The Goldsworthy Railway Line is a 210km single track railway line that runs from the Yarrie rail head to Finucane Island at Port Hedland. The operation of the Goldsworthy Railway Line can be divided into two distinct sections:
- (a) the segment of railway track from Yarrie to the Goldsworthy Junction (the **Yarrie section**); and
  - (b) the segment of railway track from the Goldsworthy Junction to Finucane Island (the **Finucane Island section**)
- 8.3 **Annexure 2** is a map of the Goldsworthy Railway Line.
- 8.4 The operation of the Yarrie section is very different to the operation of the Finucane Island section.

### Yarrie section

8.5 The Yarrie section is a single track railway that runs from the Yarrie rail head to Goldsworthy Junction, a distance of approximately 193km.

### Train operations

- 8.6 Trains depart the Goldsworthy mining area and travel west along the Yarrie section until they arrive at Goldsworthy Junction.
- 8.7 For trains travelling to Nelson Point, trains are required to wait on the Yarrie section at Goldsworthy Junction until track is available for them to proceed onto the Mt Newman Railway Line. When the Mt Newman Railway Line is available, trains travel north on that railway line to Nelson Point for unloading.
- 8.8 For trains travelling to Finucane Island, trains are required to wait on the Yarrie section at Goldsworthy Junction until track is available for them to proceed onto the Mt Newman

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<sup>9</sup> Kendall R, ABARE, Australian Commodities, December Quarter 2007.

<sup>10</sup> A report prepared for the Western Australian Government estimates that iron ore exports from the Pilbara will grow to 564mtpa – 893mtpa by 2025 : Report for the PHPA, "Port Planning Study and Ultimate Development Plan, Update 2007, 20 December 2007 (page 7).

<sup>11</sup> The Mt Newman Final Recommendation (see para 7.159).

Railway Line and the Finucane Island section of the Goldsworthy Railway Line. When the Mt Newman Railway Line and the Finucane Island section are available, trains travel north across the short section of the Mt Newman Railway Line and west onto the Finucane Island section to Finucane Island for unloading.

***Operating conditions***

- 8.9 The Yarrie section of the Goldsworthy Railway Line is in relatively poor condition. This is due to the following factors:
- (a) approximately 80% of the sleepers used on the Yarrie section are timber, most of which are in poor condition. Some timber sleepers suffer from degradation as a result of white ant infestation;
  - (b) 90% of the timber sleepers used on the Yarrie section are second hand sleepers previously used for the Mt Newman Railway Line. As timber sleepers have a life span of 5 to 10 years, many sleepers on the Yarrie section have been replaced more than once with used sleepers from the Mt Newman Railway Line;<sup>12</sup>
  - (c) the use of second hand sleepers, some of which are in poor condition, has resulted in the rail developing corrugations and dips;
  - (d) approximately two thirds of the Yarrie section retains original condition rail. The remainder consists of second hand rail previously used on the Mt Newman Railway Line which has a life span of approximately 5 years;<sup>13</sup>
  - (e) most of the bridges on the Yarrie section are more than 40 years old, suffer metal fatigue and require substantial refurbishment. The life span of several bridges will expire in the foreseeable future requiring their replacement at significant expenditure. The greater the tonnage railed over the bridges, the shorter their life span;
  - (f) there are four active sidings on the Yarrie section (Hardie, Goldsworthy, Allen and Taplin) and one inactive siding (Ryan):
    - (i) Hardie and Goldsworthy can accommodate 90 ore cars but are single ended (which means that in order to exit the siding, trains must reverse off the siding in order to move back onto the mainline);
    - (ii) Allen and Taplin can accommodate 120 and 90 ore cars respectively and are double ended (which means that in order to exit the siding, trains can move directly onto the mainline without backtracking); and
    - (iii) Ryan was single ended and was primarily used to store sleeper trains during the installation of sleepers over 10 years ago. Since that time, it has not been operational.
  - (g) minimal maintenance is performed to correspond to the amount of ore that is carried on the Yarrie section. For example, grinding is not undertaken on the Yarrie section;

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<sup>12</sup> Currently, approximately 15,000 to 20,000 timber sleepers are replaced each year. The replacement is undertaken as and when required. Though BHPBIO has a surplus of steel sleepers that have been removed from the Mt Newman Railway Line, these sleepers cannot be used on the Yarrie section because they are incompatible with the existing original 50 kg/m rail.

<sup>13</sup> BHPBIO replaces 10 to 20 km of rail per annum on the Yarrie section with second hand rail from the Mt Newman Railway Line.

- (h) the signalling and communications systems and the automatic train protection and control systems are very basic. The Yarrie section does not use the sophisticated wayside monitoring equipment installed on the Mt Newman Railway Line. Train movements are largely governed by verbal instruction from the train control room; and
- (i) parts of the Yarrie section are subject to severe flooding which has, in the past, resulted in railway track being washed away.

8.10 In light of the above factors, trains operating on the Yarrie section of the Goldsworthy Railway Line are restricted in the following ways:

- (a) locomotives have a maximum axle load of 32 tonnes and ore cars have a maximum axle load of 25-26 tonnes;
- (b) ore cars are limited to carrying approximately 80 tonnes;
- (c) trains are single rake trains of one locomotive and up to approximately 110 ore cars; and
- (d) the maximum speed on the Yarrie section is 60 km/hr.<sup>14</sup> Further, there are currently 11 segments of railway/bridges which are in such poor condition that more stringent speed restrictions are enforced over those segments. At least four of these restrictions require trains to travel at no more 25km/hr over the relevant section while the remainder require trains to travel at no more than 45km/hr.

**Historical usage**

8.11 As indicated in the Annual Reports of the BHP Billiton Group, the historical usage of the Goldsworthy Railway Line, and hence the Yarrie section, for the last 10 years has been as follows:

Financial Year <sup>15</sup>	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Tonnage (mt) <sup>16</sup>	7.5	6.1	7.5	7.8	7.6	7.9	6.9	5.5	7.3	1.4

**Current and future usage**

8.12 BHPBIO plans to transport 2mtpa on the Yarrie section for the next 5 years. However, because exploration and mining plans change from time to time, BHPBIO may in the foreseeable future increase its usage of the Yarrie section (to the extent possible given its condition).

8.13 For example, if there were to be a problem with the Mt Newman Railway Line or mining in the Newman, Yandi or Area C mining areas so that tonnage from any of those areas were

<sup>14</sup> By comparison, the maximum speed on the Mt Newman Railway Line is 75 km/h.

<sup>15</sup> The financial year end for the BHP Billiton Group changed from 31 May to 30 June, with effect from 30 June 2000. Accordingly, production figures for 1998 and 1999 are for the 12 months ended 31 May in each of those years, the production figure for 2000 is for the 13 months ended 30 June 2000, and production figures for 2001 to 2007 are for the 12 months ended 30 June in each of those years.

<sup>16</sup> Tonnages have been rounded to two significant figures. For the years 1998 to 2000, tonnage was measured by way of dry tonnes. From 2001 to 2007, tonnage was measured by way of wet tonnes.

to decrease, BHPBIO may endeavour to increase its production from the Goldsworthy mining area.

### **Capacity**

- 8.14 The Yarrie section has historically been able to accommodate up to 8mtpa.
- 8.15 BHPBIO is confident that usage of the Yarrie section could be increased to 8mtpa without significant expenditure but with a corresponding increase in ongoing maintenance activity.
- 8.16 While BHPBIO has not undertaken any formal assessment of the Yarrie section and accordingly does not know whether the Yarrie section could accommodate tonnages greater than 8mtpa, it estimates that the capacity of the Yarrie section may be able to be increased by changing some operating parameters and undertaking other significant expenditures.<sup>17</sup>
- 8.17 However, given the condition of the Yarrie section, there will be a point at which it will not be possible to increase tonnage without effectively having to replace the entire Yarrie section. This is because unless existing sleepers are replaced with new concrete sleepers and the existing rail is replaced with new rail, the restrictions referred to above will continue to be operative effectively setting a "cap" on capacity.
- 8.18 Any increase in tonnage above current usage or over 8mtpa will also be likely to affect the life of the Yarrie section. For example, if the Yarrie section operates at 8mtpa, parts of the Yarrie section (especially some of the bridges) will require replacement within the next 10 years. If tonnage is sought to be increased above 8mtpa, not only will parts of the Yarrie section need to be replaced sooner but the extent of the replacement is likely to be greater.

### ***TPI's assessment of capacity is erroneous***

- 8.19 TPI's claim that the capacity of a double tracked Yarrie section would be over 400mtpa<sup>18</sup> is completely erroneous because it fails to take into account the poor condition of the Yarrie section and the restrictions under which trains are required to operate.
- 8.20 For example, TPI's calculation is based on a theoretical maximum number of 40 trains running per day in each direction on the Yarrie section carrying 33,000 tonnes each.<sup>19</sup> In its present condition the Yarrie section is unable to accommodate this number of trains, or trains carrying this tonnage. To operate on the Yarrie section at this frequency and tonnage, the majority of the railway line would need to be built again – that is, the facility would effectively need to be replaced.

### **Finucane Island section**

- 8.21 The Finucane Island section is a single track railway approximately 17km in length that runs between the Goldsworthy Junction and BHPBIO's port facilities located at Finucane Island.

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<sup>17</sup> For example, by increasing the frequency of replacement of second hand sleepers from the Mt Newman Railway Line to the Yarrie section, replacing old sleepers on the Yarrie section with new timber or steel sleepers, refurbishing or replacing rail and bridges (there are 12 bridges on the Yarrie section and replacement of a bridge can cost up to \$20m) and increasing rolling stock inventory.

<sup>18</sup> Goldsworthy Application, para 7.9; Goldsworthy Supplementary Submission, paras 5.19 – 5.21.

<sup>19</sup> Goldsworthy Supplementary Submission, para 5.20(a) and (b).

- 8.22 The Finucane Island section is effectively used as a queuing yard to ensure that car dumper operations at Finucane Island meet required levels. In fact, the Finucane Island section is known within BHPBIO as the "Bofin" marshalling yard.<sup>20</sup>
- 8.23 A short distance of the Finucane Island section (2km) immediately to the west of the Goldsworthy Junction is technically "double tracked" and is known as an "avoiding road" because it is used for the purpose of marshalling activities and as a passing siding for trains travelling from the Mt Newman Railway Line onto the Goldsworthy Railway Line and vice versa.

### ***Train operations***

- 8.24 The following example is a typical operating cycle of train movements or "occupancy" on the Finucane Island section of the Goldsworthy Railway Line.
- 8.25 Trains depart one or more of the Newman, Yandi or Area C mining areas and travel north on the Mt Newman Railway Line to Port Hedland.<sup>21</sup>
- 8.26 When a train arrives at Bing siding, the siding on the Mt Newman Railway Line just south of the Goldsworthy Junction, one of its rakes (**rake A**) is split from the rest of the train. Rake A travels off the Mt Newman Railway Line and on to the Finucane Island section, occupying the double-track section known as the "avoiding road". The other rakes on the train continue on the Mt Newman Railway Line to Nelson Point for unloading.
- 8.27 Rake A remains stationary on the avoiding road until there is track availability on the Finucane Island section. Once the Finucane Island section is available, rake A departs the avoiding road and stops again on the Finucane Island section adjacent to the Boodarie workshop. Rake A is stationary on or "occupying" the Finucane Island section such that other trains cannot move on the Finucane Island section. The locomotive attached to rake A is removed and taken into the workshop and a shunt locomotive and two index cars (known as spacers) are attached to the rake to enable unloading at Finucane Island. This process is called a "change out".
- 8.28 The workshop (which comprises a number of rail sidings) serves the following purposes:
- (a) removing locomotives from stationary rakes and attaching shunt locomotives and spacers to prepare rakes for unloading;
  - (b) preparing the locomotives (maintenance, service and fuel) for re-attachment to unloaded rakes for travel back to a mining area or in some cases to Nelson Point;
  - (c) turning locomotives around so that they are facing in the correct direction; and
  - (d) inspecting ore cars.
- 8.29 The Boodarie workshop cannot be used as a passing siding for the Finucane Island section because there are no free rail sidings available in the workshop in light of the other activities that must be undertaken to prepare rakes for unloading and travel back to mines. Further, there are a number of BHPBIO personnel working on the tracks in the workshop

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<sup>20</sup> The Bofin yard commences from the point the double tracked avoiding road joins the mainline of the Finucane Island section to the beginning of the railway loop at Finucane Island where the unloading facilities are located – a total distance of 15km.

<sup>21</sup> Alternatively, a train may originate from the Goldsworthy mining area. For the purposes of the example, it makes no substantive difference except that a train from the Goldsworthy mining area will not need to be split into rakes as it will usually only be a one rake train. Trains from the other mining areas can be 1, 2 or 3 rake trains.

creating a serious safety issue if any attempt was made to use the sidings as passing sidings.

- 8.30 Once the shunt locomotive and spacers have been attached to rake A, it can proceed to Finucane Island. Prior to entering the railway loop where the unloading facilities are located (**Finucane loop**), rake A must obtain clearance from personnel operating the car dumper (**CD4**) because CD4 must be readied for unloading a new rake. At this stage, rake A is again stationary on the Finucane Island section until it is granted clearance. Once clearance is granted by CD4, rake A proceeds onto the Finucane loop and moves through to CD4 for unloading.
- 8.31 While rake A is unloading, another train from one or more of the Newman, Yandi or Area C mining areas travelling north on the Mt Newman Railway Line to Port Hedland will arrive at Bing siding. One of the rakes on this train (**rake B**) proceeds onto the avoiding road and stops on the Finucane Island section adjacent to the Boodarie workshop for a change out. At this point, rake B is stationary on or "occupying" the Finucane Island section.
- 8.32 After a change out has been completed for rake B, it proceeds on the Finucane Island section to Finucane Island but stops before the Finucane loop because rake A is being unloaded by CD4. Rake B can only enter the Finucane loop once rake A has finished being unloaded and CD4 is readied for the unloading of a new rake.
- 8.33 Because there is one car dumper at Finucane Island and a single railway line serving the car dumper which is the mainline itself, it is imperative for BHPBIO to have constant queue of rakes ready to enter the Finucane loop for unloading (known as "choke feeding"). This ensures that there is no unused capacity in this part of the system as BHPBIO is seeking to maximise its throughput of product unloaded by CD4 to achieve tonnage targets.
- 8.34 While rake A is unloading and rake B is waiting to enter the Finucane loop, another train from one or more of the Newman, Yandi or Area C mining areas travelling north on the Mt Newman Railway Line to Port Hedland will arrive at Bing siding. One of the rakes on this train (**rake C**) will proceed onto the avoiding road and stop on the Finucane Island section adjacent to the Boodarie workshop for a change out. At this point, both rake B and rake C are stationary on or "occupying" the Finucane Island section. Rake B and rake C cannot move and no other trains can move elsewhere on the Finucane Island section until rake A has completed unloading.
- 8.35 Once rake A has finished being unloaded and CD4 is readied for unloading rake B, rake B enters the Finucane loop. Once rake B has moved off the Finucane Island section and into the Finucane loop, rake A can exit the Finucane loop and move back onto the Finucane Island section. Because CD4 is rarely unutilised or waiting idle for a rake, at least one train will generally always be stationary on the Finucane Island section prohibiting the movement of any other trains through the Finucane Island section.
- 8.36 Rake A travels the other way along the Finucane Island section and enters the Boodarie workshop. Once rake A is in the Boodarie workshop, rake C can proceed towards Finucane Island, though it will stop before entering the Finucane loop.
- 8.37 It should be noted, however, that the change out for rake C may not necessarily occur at the time rake C stops adjacent to the workshop. This is because in many instances there are no spare shunt locomotives or spacers in the workshop. As a result, rake C must wait on the Finucane Island section until rake A has finished unloading and has returned to the workshop at which time the shunt locomotive and spacers from rake A can be transferred to rake C.

8.38 At this point:

- (a) rake A has been unloaded and is in the Boodarie workshop being prepared for travel back to a mining area or Nelson Point;
- (b) rake B is being unloaded by CD4;
- (c) rake C is stationary on the Finucane Island section immediately prior to the Finucane loop waiting for rake B to be unloaded; and
- (d) another train from one or more of the Newman, Yandi or Area C mining areas travelling north on the Mt Newman Railway Line to Port Hedland will arrive at Bing siding. One of the rakes on this train (**rake D**) proceeds onto the Finucane Island section but must stop on the avoiding road given the other traffic on the Finucane Island section.

8.39 Depending upon the priority of the production system as a whole, any of the following scenarios may occur next:

- (a) rake D does not proceed on the Finucane Island section until rake A has departed the Boodarie workshop and the Finucane Island section altogether. In these circumstances, once rake A has exited the Finucane Island section, rake D would proceed but is required to stop on the Finucane Island section adjacent to the Boodarie workshop; or
- (b) rake D would proceed on the Finucane Island section first and stop adjacent to the Boodarie workshop. Once rake D has stopped, rake A could exit the workshop and depart the Finucane Island section either to:
  - (i) Bing siding where it would be coupled to an empty train travelling to one of the mining areas to collect more product; or
  - (ii) Nelson Point.

8.40 This represents one complete cycle.

8.41 The full utilisation of the Finucane Island section as a result of trains queuing to access CD4 is illustrated by the following modelling outputs under BHPBIO's currently proposed Rapid Growth Project 5 (**RGP5**) operational parameters:

<b>Output</b>	<b>RGP5</b>
Average time of a rake in CD4	157 mins
Percentage of rakes where there is no time delay between dumping	88%
Time delay between dumping rakes for 90% of rakes	Less than 4 mins

***Operating conditions***

8.42 The Finucane Island section of the Goldsworthy Railway Line is in good condition, comparable to that of the Mt Newman Railway Line.

- 8.43 **Annexure 3** is a non-confidential version of the affidavit (not including annexures) of Michael van Der Worp affirmed on 14 December 2007 and filed in the Tribunal proceedings, that provides details of the condition of the Mt Newman Railway Line.<sup>22</sup>
- 8.44 Trains operate on the Finucane Island section of the Goldsworthy Railway Line as follows:
- (a) locomotives and ore cars have a maximum axle load of 37.5 - 40 tonnes;
  - (b) ore cars can carry approximately 129 tonnes of ore each;
  - (c) trains can be 1, 2 or 3 rake trains with up to 110 ore cars per rake;
  - (d) the maximum speed is 50 km/hr due to the short distance of the Finucane Island section and the nature of train operations discussed above; and
  - (e) there are no signalling systems on the Finucane Island section as installed on the Mt Newman Railway Line. Rather, all train movements on the Finucane Island section are controlled by verbal instruction from the train control room.

***Current and future usage***

- 8.45 In the financial year ending June 2008, the usage of the Finucane Island section has been as follows:

Quarter (YEJ08)	1	2	3
Tonnage (mtpa) <sup>23</sup>	39.30	36.65	31.88 <sup>24</sup>

- 8.46 The future usage of the Finucane Island section, so far as can be predicted, is as follows:
- (a) Rapid Growth Project 4 (**RGP4**) has been approved but its implementation is yet to commence. It is currently planned that operations will be at the 14 train movement limit per day (discussed below), resulting in an annual tonnage of 39mt;
  - (b) RGP5 is still in the developmental stages and has not been submitted for board approval. Under RGP5, usage of the Finucane Island section will continue to be at the operational limit of 14 trains per day. If longer trains are able to be operated on the Finucane Island section then an increased tonnage may be able to be achieved. However, if shorter trains are employed by BHPBIO on the Mt Newman Railway Line then the tonnage that can be accommodated on the Finucane Island section will correspondingly decrease; and
  - (c) the proposed Quantum projects are currently only in very early developmental stages and range of options are being explored. There is consequently no firm understanding of the likely usage of the Finucane Island section.

***Capacity***

- 8.47 The Finucane Island section is effectively used as a queuing yard so trains are usually stationary on or "occupy" the Finucane Island section for significant periods of time. As a

<sup>22</sup> In particular, see paras 10 - 156.

<sup>23</sup> These tonnages are expressed as annualised amounts.

<sup>24</sup> Throughput was restricted during this period due to major equipment shutdowns.

result, capacity in relation to the Finucane Island section should be understood to relate to train "occupancies" rather than just train "movements".

- 8.48 The current capacity of the Finucane Island section of the Goldsworthy Railway Line is estimated at 14 rake "occupancies" per day each way (that is, approximately one rake occupancy every hour). The Finucane Island section cannot accommodate an increase in movements or occupancies.
- 8.49 BHPBIO is currently using all of the capacity on the Finucane Island section and will use the capacity for the foreseeable future.

***Expanding capacity***

- 8.50 BHPBIO does not currently propose to double track the Finucane Island section as:
- (a) the township of South Hedland is situated close by and BHPBIO is mindful of the environmental and hydrological challenges of additional train movements in this area; and
  - (b) as recognised by the Applicant, the lack of physical space between Goldsworthy Junction and Finucane Island presents practical difficulties with double tracking the Finucane Island section.<sup>25</sup>
- 8.51 **Annexure 4** is a map of the area between the Goldsworthy Junction and Fortescue/TPI's unloading facilities which demonstrates the lack of physical space on either side of the Finucane Island section.
- 8.52 Even if the Finucane Island section were to be double tracked (and it is uncertain whether this is even possible given the issues discussed above), the capacity of a double tracked Finucane Island section is unknown, because:
- (a) BHPBIO has not undertaken any formal assessment of a double tracked Finucane Island section;
  - (b) the Finucane Island section would effectively still be used as a queuing yard by BHPBIO;
  - (c) it is unknown whether there is sufficient space between a dual track for crossovers; and
  - (d) there may be significant environmental concerns if there were an increase in movements on the Finucane Island section.

**Other Rail facilities – Current, Proposed and Alternative**

- 8.53 There is an existing rail facility and a proposed rail facility either of which could provide part of the service provided by the Finucane Island section of the Goldsworthy Railway Line.

***Chichester Railway Line***

- 8.54 The Chichester Railway Line (from the point that it crosses the Mt Newman Railway Line) already effectively provides the service provided by the Finucane Island section in respect

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<sup>25</sup> Goldsworthy Supplementary Submission, para 5.23.

of the transportation of iron ore from the Mindy Mindy area to Fortescue/TPI's port facilities at Anderson Point.<sup>26</sup>

- 8.55 BHPBIO also understands that in the event that Fortescue is able to obtain access to the Mt Newman Railway Line but is unable to obtain access to the Goldsworthy Railway Line, Fortescue has proposed that it and/or the Applicant will build a rail spur from the Mt Newman Railway to the Chichester Railway Line, at a point approximately 10 km south of the Goldsworthy Junction.

***Proposed New BHPBIO Railway Line***

- 8.56 BHPBIO is considering rail options other than the Finucane Island section to increase the tonnage of ore that can be transported to Finucane Island. In March 2008, BHPBIO lodged an application with the Mining Registrar of WA to construct a new railway line (**Proposed new BHPBIO Railway Line**). If approved, such a railway may be constructed from a point on the Mt Newman Railway Line approximately 20-30km south of the Goldsworthy Junction, running north-west for approximately 10km and then north for approximately 15km into Finucane Island.
- 8.57 **Annexure 5** is BHPBIO's application to the Mining Registrar of WA for a Miscellaneous Licence dated 7 March 2008 to "conduct all activities necessary for the planning, design, construction, commissioning, operation and maintenance of a railway and associated infrastructure . . .".
- 8.58 The fact that BHPBIO is considering constructing the Proposed New BHPBIO Railway Line is an indication that the Finucane Island section is, and will for the foreseeable future, be capacity constrained.
- 8.59 If constructed, the Proposed New BHPBIO Railway Line would be a facility that provides part of the service provided by the Finucane Island section.

***Connection of Finucane Island section to Applicant's port facilities***

- 8.60 Assuming that the Goldsworthy Service were to be declared, a railway connection would need to be established between the Finucane Island section and the Applicant's railway loop leading into its train unloading facilities (**Connecting Spur**) for any rail traffic on the Finucane Island section to be able to use the Applicant's unloading and other port facilities near Anderson Point.
- 8.61 The only possible route for the Connecting Spur is marked as option 1 on the map which is **Annexure 6** to this submission.
- 8.62 However, it is very unlikely that the Connecting Spur would be viable and approved by the relevant authorities given the lack of available land.
- 8.63 The Connecting Spur would:
- (a) require water tanks to be relocated;
  - (b) run through the South Hedland golf course and adjacent to the South Hedland racetrack; and

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<sup>26</sup> This alternative assumes that Fortescue will be successful in obtaining access to the Mt Newman Railway Line for the Mindy Mindy prospect **and** that it would be able to exit to the Mt Newman Railway Line at a point that is approximately 20km south of Goldsworthy Junction. However, because Fortescue has applied for a "point to point" service on the Mt Newman Railway Line from a point in the vicinity of Mindy Mindy to port facilities at Nelson Point, this may not be possible.

- (c) run very close to the existing township resulting in increased environmental concerns (noise and dust pollution) for the residents of South Hedland.
- 8.64 Accordingly, given the lack of available land between the Finucane Island section and the Applicant's train unloading facilities, it would be virtually impossible for a railway spur to be constructed that connects the Finucane Island section to the Chichester Railway Line.

***Alternative rail facility – Goldsworthy Junction to Anderson Point section***

- 8.65 There is an alternative facility that could be developed to provide the service provided by the Finucane Island section of the Goldsworthy Railway Line. This alternative facility is a railway spur that connects the Yarrie section of the Goldsworthy Railway Line (immediately east of the Goldsworthy Junction) to the Chichester Railway Line and Fortescue/TPI's unloading facilities near Anderson Point (**Goldsworthy Junction to Anderson Point section**).
- 8.66 The Goldsworthy Junction to Anderson Point section would enable any product that is ultimately produced (if any product is produced at all) to be transported from the sites of the five projects and prospects identified by TPI<sup>27</sup> and the Mindy Mindy prospect (assuming that saleable ore exists) to port facilities.
- 8.67 The Goldsworthy Junction to Anderson Point section is marked as option 2 on the map which is **Annexure 6** to this submission.
- 8.68 It is likely that the Goldsworthy Junction to Anderson Point section would be viable given the availability of land for the construction of such a railway line.<sup>28</sup>
- 8.69 The Goldsworthy Junction to Anderson Point section would:
- (a) not require the relocation of any other infrastructure; and
  - (b) be located a significant distance from existing townships thus minimising any noise or dust pollution.
- 8.70 The cost of constructing the Goldsworthy Junction to Anderson Point section would be in the order of \$80-100 million.

**9. THE APPLICANT**

**TPI and Fortescue**

- 9.1 The Applicant is a wholly owned subsidiary of Fortescue.
- 9.2 The Applicant, Fortescue and the State of Western Australia are parties to the TPI State Agreement.
- 9.3 Under the TPI State Agreement, the Applicant is responsible for the construction and operation of the Chichester Railway Line and port facilities at Anderson Point.

**Iron ore projects and prospects**

- 9.4 Fortescue has iron ore projects in the Pilbara, including the Chichester Ranges project and the Solomon project. Fortescue also has a 50% interest in the small Mindy Mindy prospect.

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<sup>27</sup> Goldsworthy Supplementary Submission, para 5.23.

<sup>28</sup> Generally, a distance of 100m is required between railways for derailment and access issues. Further, while the land may be subject to certain applications, a railway line would be likely to be approved under the "competing use" test.

***Chichester Ranges project***

- 9.5 Fortescue's Chichester Ranges project comprises iron ore tenements including Cloud Break and Christmas Creek. These tenements are located around 100km north west of the township of Newman.
- 9.6 Fortescue has made the following public announcements in relation to proposed levels of production of iron ore from its Chichester Ranges project:<sup>29</sup>
- (a) an initial rate of 45mtpa, with the first ore to be shipped in May 2008;
  - (b) expansion to 110mtpa after 2010; and
  - (c) further expansion to 120mtpa.
- 9.7 Fortescue has already commenced transporting iron ore from its Chichester Ranges project on the Chichester Railway Line to its port facilities at Anderson Point.

***Solomon Project***

- 9.8 Fortescue's proposed Solomon project is located approximately 70km north of Tom Price in the central Pilbara region<sup>30</sup> and 25km north of Rosella siding. The proposed area of the project extends on both sides of the Hamersley Railway Line.<sup>31</sup>
- 9.9 Fortescue has announced that it expects to produce approximately 80mtpa from its tenements in the central Pilbara which include the Solomon project.<sup>32</sup>
- 9.10 Fortescue has announced that it proposes to transport iron ore from the Solomon project on the Kennedy Railway Line to the Chichester Railway Line and then on the Chichester Railway Line to Fortescue/TPI's port facilities at Anderson Point.<sup>33</sup>

***Mindy Mindy Prospect***

- 9.11 The Mindy Mindy prospect refers to an area of mineralisation in relation to which Fortescue has undertaken some preliminary investigations as part of a joint venture with ConsMin (now Palmary).
- 9.12 The site of the prospect is immediately east of Weeli Wooli Creek in the Pilbara. It is approximately 50km east of BHPBIO's Area C mining area, 60km north west of Newman and 295km south east of Port Hedland.
- 9.13 The Mindy Mindy prospect is located near a number of railway lines. It is approximately:
- (a) 17km from the Mt Newman Railway Line;
  - (b) 125km from Cloud Break on the Chichester Railway Line,<sup>34</sup> and

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<sup>29</sup> For example, Fortescue's presentation given to the Metal Bulletin Conference, "An Australian Story: A world of opportunity", dated 27 November 2007.

<sup>30</sup> Fortescue's Quarterly Report December 2007, p3.

<sup>31</sup> Robe River Application (para 8.43); Hamersley Supplementary Submission (para 6.41).

<sup>32</sup> For example, Fortescue's presentation given to the Metal Bulletin Conference, "An Australian Story: A world of opportunity", dated 27 November 2007 (page 11).

<sup>33</sup> Robe River Application (para 8.43) and the Hamersley Supplementary Submission (para 6.41).

- (c) 165km from the Hunter siding, the proposed point at which the Kennedy Railway Line will connect to the Chichester Railway Line.<sup>35</sup>
- 9.14 Fortescue has posited that, if proven up, the Mindy Mindy prospect may be able to sustain a 5mtpa operation for around 12 years. However, Fortescue has stated that it will not conduct further investigations into the viability of the Mindy Mindy prospect until rail access is secured.
- 9.15 It is very unlikely that the Mindy Mindy prospect is economically viable.<sup>36</sup>
- 9.16 **Annexure 7** is a copy of a non-confidential version of the affidavit (not including the annexures) of Richard Harmsworth, a senior geologist, affirmed on 20 December 2007 and filed in the Tribunal proceedings, that examines the Mindy Mindy prospect.
- 9.17 **Annexure 8** is a copy of a non-confidential version of the affidavit (not including the annexures) of Derek Miller, a senior mining engineer, sworn on 20 December 2007 and filed in the Tribunal proceedings, that examines the Mindy Mindy prospect.
- 9.18 Even if the Mindy Mindy prospect were economically viable, there is no reason why it could not be developed regardless of whether access to the Goldsworthy Railway Line and Mt Newman Railway Line was available given the range of alternatives (as discussed below) that are available to Fortescue to develop and exploit the Mindy Mindy prospect.<sup>37</sup>
- 9.19 The Goldsworthy Application and the Goldsworthy Supplementary Submission are silent on whether iron ore from the Mindy Mindy prospect would be transported on the Goldsworthy Railway Line, if the prospect were to be developed.
- 9.20 However, Fortescue has elsewhere stated that it may seek to use the Finucane Island section of the Goldsworthy Railway Line to transport iron ore from Mindy Mindy to port facilities in Port Hedland including, the Applicant's port facilities at Anderson Point.
- 9.21 In particular, Fortescue has postulated that, if the Mindy Mindy prospect were to be developed, it would transport iron ore from the prospect to port facilities at Port Hedland by the following means:
- (a) truck ore from the proposed Mindy Mindy mine site to a rail siding on the Mt Newman Railway Line; and
  - (b) transport the ore on the Mt Newman Railway Line:

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<sup>34</sup> This distance is approximate and assumes that a haul road from Mindy Mindy to Cloud Break would follow the Mt Newman Railway Line to the western extremity of the Fortescue Marshes at the Cowra line camp, and return along the northern edge of the Fortescue Marshes to Cloud Break. The straight line distance from Mindy Mindy to Cloud Break is approximately 60km.

<sup>35</sup> This distance is approximate and assumes that ore from Mindy Mindy would be transported predominantly on existing roads (with the exception of short sections from Mindy Mindy to the nearest main road and from the Great Northern Highway to the proposed Hunter Siding). The straight line distance from Mindy Mindy to the proposed Hunter Siding is approximately 125km.

<sup>36</sup> Mindy Mindy is a small, low grade deposit, of significantly inferior quality to that being mined by both BHPBIO and RTIO in high volumes in the nearby Yandicoogina-Marillana deposit: Affidavit of Richard Harmsworth affirmed on 20 December 2007 and filed in the Tribunal proceedings, paras 287 to 414 and para 431 (**Annexure 7**) Further, it is unclear whether there is sufficient mineralisation at the Mindy Mindy prospect to support production in the volumes proposed by Fortescue and to make the development of the Mindy Mindy prospect worthwhile: Affidavit of Derek Miller sworn of 20 December 2007 and filed in the Tribunal proceedings, paras 81 to 106 (**Annexure 8**).

<sup>37</sup> In particular, Fortescue has stated that the cost of proving up the Mindy Mindy prospect is prohibitive. BHPBIO considers that this is wrong: see affidavit of Richard Harmsworth affirmed on 20 December 2007 and filed in the Tribunal proceedings (paras 355-365) (**Annexure 7**) and affidavit of Derek Miller sworn on 20 December 2007 and filed in the Tribunal proceedings (paras 109-115) (**Annexure 8**).

- (i) to Goldsworthy Junction and then on the Finucane Island section of the Goldsworthy Railway Line to TPI's port facilities at Anderson Point or other port facilities in Port Hedland; or
  - (ii) to a point south of the Goldsworthy Junction and then on a rail spur proposed to be constructed by Fortescue from the Mt Newman Railway Line to port facilities or stockpiling areas connected to a wharf by conveyor at Port Hedland.<sup>38</sup>
- 9.22 The proposal to transport iron ore from Mindy Mindy on the Finucane Island section of the Goldsworthy Railway Line may not be possible because the Full Court of the Federal Court has determined that the Mt Newman Service sought by Fortescue is only a "point to point" service. This means the only starting point for use of the Mt Newman Railway Line is in the vicinity of Mindy Mindy and the only end point is port facilities at Nelson Point in Port Hedland.<sup>39</sup> Consequently, Fortescue trains could not leave the Mt Newman Railway Line at Goldsworthy Junction, or any point further south, such as on a railway spur from the Mt Newman Railway Line to the Chichester Railway Line.
- 9.23 Even if it were possible for Fortescue to transport iron ore from Mindy Mindy on the Mt Newman Railway Line and then onto the Finucane Island section of the Goldsworthy Railway Line, there are a number of other alternatives available to Fortescue for the transportation of iron ore from Mindy Mindy to port facilities without the use of the Finucane Island section of the Goldsworthy Railway Line. These other alternatives are:
- (a) by road from Mindy Mindy to loading facilities at the Cloud Break site of the Chichester Ranges project and then by rail on the Chichester Railway Line to the Applicant's port facilities at Anderson Point;
  - (b) by road from Mindy Mindy to the Hunter siding (on the Chichester Railway Line) and then by rail on the Chichester Railway Line to the Applicant's port facilities at Anderson Point;
  - (c) by constructing a railway spur from the Chichester Railway Line to Mindy Mindy and using that spur and the Chichester Railway Line to transport the ore to the Applicant's port facilities at Anderson Point;<sup>40</sup>
  - (d) by rail on the Mt Newman Railway Line to the point at which it crosses the Chichester Railway Line and then by rail on the Chichester Railway Line to the Applicant's port facilities at Anderson Point;<sup>41</sup> or
  - (e) as Fortescue itself has recognised, by rail on the Mt Newman Railway Line to a point in the vicinity of Goldsworthy Junction and then on a railway spur proposed to

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<sup>38</sup> Fortescue does not state where this rail spur would connect to the Mt Newman Railway Line or whether it would connect to the Chichester Railway Line. However, given the lack of available land between Goldsworthy Junction and TPI's port facilities at Anderson Point, it could be assumed that the rail spur would connect to the Mt Newman Railway Line at a point approximately 10km south of Goldsworthy Junction and to the Chichester Railway Line before the car dumper operations.

<sup>39</sup> *Rio Tinto Limited v The Australian Competition Tribunal* [2008] FCAFC 6 (14 February 2008) [42], [61] – [62]. The Full Court of the Federal Court stated that there is "nothing in the description of the service which would permit access at any point between Mindy Mindy and either Nelson Point or Finucane Island in Port Hedland."

<sup>40</sup> Fortescue has previously considered and even obtained environmental approval for this option : Public Environmental Review for Fortescue's Pilbara Iron Ore and Infrastructure Project, Stage A: Port and North-South Railway. Environmental approval for the Stage A Application was granted in October 2005: see Fortescue's ASX announcement, "Environmental Approval for Stage A Application", dated 5 October 2005.

<sup>41</sup> This alternative assumes that Fortescue will be successful in obtaining access to the Mt Newman Railway Line for the Mindy Mindy prospect **and** that it would be able to exit to the Mt Newman Railway Line at a point that is not Nelson Point.

be constructed by Fortescue from the Mt Newman Railway Line to the Applicant's port facilities at Anderson Point.<sup>42</sup>

### **Railway and port infrastructure**

#### ***Chichester Railway Line***

- 9.24 The Chichester Railway Line is a 260km railway which runs from Fortescue's Cloud Break mine in the Chichester Ranges to the Applicant's port facilities at Anderson Point.<sup>43</sup> The TPI State Agreement requires that the Chichester Railway Line have a capacity of "not less than" 70mtpa and be an open track access railway.<sup>44</sup>
- 9.25 Fortescue has announced the Chichester Railway Line was completed on 8 April 2008.<sup>45</sup>
- 9.26 Fortescue and the Applicant also propose to construct a railway spur from the Chichester Railway Line to Fortescue's proposed Glacier Valley tenements.<sup>46</sup>

#### ***Kennedy Railway Line***

- 9.27 The Kennedy Railway Line is a railway line which Fortescue and the Applicant propose to construct from the Chichester Railway Line to Fortescue's Eliwana deposit in the Pilbara, a distance of approximately 240km.<sup>47</sup>
- 9.28 Fortescue has stated that the Kennedy Railway Line will intersect with the Chichester Railway Line at Hunter siding, located 185km south of Anderson Point and that this siding will be an open access siding for third party users.<sup>48</sup>
- 9.29 The Kennedy Railway Line will also cross the Hamersley Railway Line.
- 9.30 **Annexure 9** are maps showing the Kennedy Railway Line, the Chichester Railway Line and the proposed rail spur to Fortescue's Glacier Valley tenement.

#### ***Port facilities at Anderson Point***

- 9.31 The Applicant has almost completed the construction of port facilities at Anderson Point in Port Hedland.
- 9.32 Fortescue and the Applicant plan to transport Fortescue's iron ore on the Chichester Railway Line to the Applicant's train unloading facilities south of Anderson Point at Port Hedland. After the ore is unloaded, it will be transported by conveyor over the Finucane Island section of the Goldsworthy Railway Line to stockpiles south of Anderson Point. The

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<sup>42</sup> This alternative assumes that Fortescue will be successful in obtaining access to the Mt Newman Railway Line for the Mindy Mindy prospect **and** that it would be able to exit to the Mt Newman Railway Line at a point that is approximately 20km south of Goldsworthy Junction. However, because Fortescue has applied for a "point to point" service on the Mt Newman Railway Line from a point in the vicinity of Mindy Mindy to port facilities at Nelson Point, this may not be possible.

<sup>43</sup> Goldsworthy Application, para 2.3.

<sup>44</sup> TPI State Agreement, clauses 10(2)(a) and 16.

<sup>45</sup> Fortescue's ASX announcement, "Rail complete to Cloudbreak", dated 8 April 2008.

<sup>46</sup> Fortescue's presentation to the AJM Global Iron Ore and Steel Forecast Conference, "The new force in iron ore comes of age", dated 12 March 2008 (page 12).

<sup>47</sup> Fortescue's presentation to the AJM Global Iron Ore and Steel Forecast Conference, "The new force in iron ore comes of age", dated 12 March 2008 (page 12).

<sup>48</sup> Fortescue's ASX announcement, "First ore on train and completion of track laying to Cloudbreak", dated 6 April 2008.

ore will then be reclaimed from the stockpiles and loaded onto ships at the Applicant's berths at Anderson Point.

- 9.33 In its March 2008 Construction Report, Fortescue stated that its (the Applicant's) port works were 96% complete and that the scheduled date for the commencement of the loading of its ore on ships is mid May 2008.<sup>49</sup> In April 2008, Fortescue described its (the Applicant's) port facilities as "now commissioning".<sup>50</sup>
- 9.34 Fortescue has made the following public announcements in relation to the proposed capacity and layout of the Applicant's port facilities at Anderson Point.<sup>51</sup>
- (a) to achieve an anticipated 55mtpa it will use 2 loading berths, 1 ship loader, a 3.2mt stockpile, a single rail loop, 1x2 car dumper<sup>52</sup> and a lump circuit;
  - (b) to achieve an anticipated 110mtpa it will use 3 loading berths, a 6.5mt stockpile, a double track rail loop and 2x2 car dumpers; and
  - (c) to achieve an anticipated 200+mtpa it will use 6 Cape size berths, 1 Panamax berth, 4-track rail loop, 4 car dumpers and a 200+mtpa stockyard.
- 9.35 Under the TPI State Agreement, the Applicant's port facilities at Anderson Point will be open access facilities.
- 9.36 Notably:
- (a) BC Iron has entered a memorandum of understanding with Fortescue under which the parties will negotiate commercial terms for rail haulage, port handling and ship loading services to be provided by the Applicant;<sup>53</sup> and
  - (b) Atlas has entered a memorandum of understanding with Fortescue to negotiate in good faith to agree commercial terms under which the Applicant will provide interim port handling and ship loading services at a rate of up to 1mtpa of iron ore from Atlas' Pardoo project, for a period of approximately 12 months or such time as the proposed public berth is commissioned at Utah Point.<sup>54</sup>
- 9.37 Fortescue has also announced that it is investigating the construction of a dedicated ore conveyor connecting its (the Applicant's) port facilities at Anderson Point to the new public berth facilities proposed for Utah Point.

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<sup>49</sup> Fortescue's ASX announcement, "Lodgement of Note Holder Monthly Report", dated 28 April 2008.

<sup>50</sup> Fortescue's ASX announcement, "First ore on train and completion of track laying to Cloudbreak", dated 6 April 2006.

<sup>51</sup> Fortescue's presentation to the AJM Global Iron Ore and Steel Forecast Conference, "The new force in iron ore comes of age", dated 12 March 2008 (pp11-12).

<sup>52</sup> This is a dual rail car rotary dumper designed to unload two ore cars simultaneously.

<sup>53</sup> BC Iron, "MoU with Fortescue Metals Group Ltd" ASX Announcement dated 6 July 2007. The memorandum of understanding is subject to the successful completion of a Bankable Feasibility Study in respect of BC Iron's Nullagine project.

<sup>54</sup> The memorandum of understanding also provides that Atlas and Fortescue will negotiate in good faith to agree commercial terms on which TPI will provide Atlas with port handling and ship loading services by TPI at a rate of up to 3mtpa of iron ore from Atlas' Abydos project and port handling and ship loading services by TPI for up to 10mtpa of magnetite concentrate from Atlas' Pardoo Magnetite Project: Atlas ASX announcement, "MoU signed with Fortescue Metals Group Limited", dated 11 June 2007.

## 10. THIRD PARTY PROJECTS AND PROSPECTS

### Projects and prospects identified by TPI

#### Overview

- 10.1 The Applicant has identified five projects and prospects that may seek to use a rail haulage service provided by the Applicant if the Goldsworthy Service were to be declared:<sup>55</sup> Those projects and prospects are:
- (a) Atlas' *Pardoo* iron ore project;<sup>56</sup>
  - (b) Jupiter Mines' *Shay Gap* iron ore prospect;
  - (c) Polaris' *Goldsworthy JV* iron ore prospect;<sup>57</sup>
  - (d) API's iron ore prospect "over an area just south of BHPB's Mount Goldsworthy Mine", known as the *Mount Grant* iron ore prospect;<sup>58</sup> and
  - (e) Palmary's *Woodie Woodie* manganese project.
- 10.2 Neither Fortescue nor the Applicant own or have any interests in any of the above projects or prospects.
- 10.3 The information about these projects and prospects which is publicly available is discussed below.

#### **Atlas - Pardoo iron ore project**

- 10.4 The Goldsworthy Supplementary Submission states:

*"Atlas Iron Limited (Atlas Iron) intends to produce 3Mtpa from its Pardoo project by 2010. TPI would like to be able to haul that iron ore from Pardoo along the Goldsworthy railway to Utah Point."*<sup>59</sup>

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<sup>55</sup> Goldsworthy Supplementary Submission, para 5.12.

<sup>56</sup> Atlas has two projects at Pardoo - the Pardoo iron ore project (from which Atlas proposes to produce 3mtpa of ore) and the Pardoo Magnetite project (from which Atlas proposes to produce 10mtpa of iron ore concentrate). References to Atlas' "Pardoo iron ore project" in this submission refer to the first project. This is because the Applicant has stated that TPI would like to haul 3mtpa of ore from Atlas' Pardoo project to Utah Point on the Goldsworthy Railway Line. This statement corresponds to the Pardoo iron ore project and not the Pardoo Magnetite Project. For the latter project, Atlas has stated that it plans to transport the iron ore concentrate produced by slurry pipeline: Atlas Presentation, "The Right Place and the Right Time", dated February 2008.

<sup>57</sup> The Goldsworthy JV prospect is a joint venture between Polaris and Leviathan Resources Limited (a wholly owned subsidiary of Perseverance Corporation Limited). Under the terms of the joint venture, Polaris can earn a minimum 70% interest in the prospect by spending \$2.5 million over a four year period: Polaris' Annual Report 2007, p9. It should be noted that while this prospect is consistent with TPI's description of the prospect in para 5.12(c) of the Goldsworthy Supplementary Submission, Attachment 2 to the Goldsworthy Application appears to identify different tenements, namely, Polaris' Poondano and De Grey prospects. In light of the Goldsworthy Supplementary Submission, this appears to be a mistake. As a result, this submission assumes that the Applicant only intends to haul ore from Polaris' Goldsworthy JV prospect and not Polaris' Poondano or De Grey prospects. Indeed, the latter prospect are between approximately 10km to 60km east of Port Hedland making road haulage economically feasible.

<sup>58</sup> Aquila has named this prospect "Mount Grant" (Aquila, Annual Report 2007).

<sup>59</sup> Goldsworthy Supplementary Submission, para 5.12(a).

- 10.5 Atlas has made the following public announcements in relation to the Pardoo iron ore project:
- (a) Atlas plans to commence mining operations in October 2008 with initial production of 1mtpa of iron ore, increasing to 3mtpa by 2010;<sup>60</sup>
  - (b) the project is 75km east of Port Hedland;<sup>61</sup>
  - (c) the Great Northern Highway provides a direct route from the project to Port Hedland and Atlas intends to transport ore from the project to Port Hedland's public access port by road haulage;<sup>62</sup> and
  - (d) with respect to the use of road haulage to transport iron ore from the project to port facilities:
    - (i) "the Pardoo Project is viable using road haulage";<sup>63</sup>
    - (ii) "at only 75km from a public access port and a road rated to carry road trains crossing the project, Pardoo is well located";<sup>64</sup> and
    - (iii) "only 75 kilometres from port and not constrained by needing a rail agreement..."<sup>65</sup>.

***Jupiter Mines - Shay Gap iron ore prospect***

- 10.6 The Goldsworthy Supplementary Submission states:

*"Jupiter Mines Limited holds an exploration licence at Shay Gap which is located around 180 kilometres east of Port Hedland. The Goldsworthy Railway passes through the north west part of the associated project area, [sic] Although highly prospective, exploration activity is not sufficiently advanced to be able to estimate potential rates of production."*<sup>66</sup>

- 10.7 Jupiter Mines has publicly announced that the north west sector of the Shay Gap prospect area is "serviced by a main road, the Great Northern Highway."<sup>67</sup>
- 10.8 Jupiter Mines has not stated whether it proposes to use road haulage or other transportation means to transport iron ore from mine to port.

***Polaris - Goldsworthy JV iron ore prospect***

- 10.9 The Goldsworthy Supplementary Submission states:

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<sup>60</sup> Atlas Presentation, "The Right Place and the Right Time", dated February 2008.

<sup>61</sup> Atlas Quarterly Report December 2007, dated 31 January 2008.

<sup>62</sup> Atlas Presentation, "Resources Rising Stars", dated 27 September 2007; Atlas Presentation, "Mining the Pilbara", dated May 2007; Atlas Presentation "Pilbara Iron Ore", dated February 2007.

<sup>63</sup> Atlas ASX announcement – "Port Hedland Port – Public access berth expansion commenced", dated 17 May 2007.

<sup>64</sup> Atlas Presentation, "The Right Place and the Right Time", dated February 2008.

<sup>65</sup> Atlas ASX Announcement, "Open Briefing – Atlas Iron", dated 25 February 2008.

<sup>66</sup> Goldsworthy Supplementary Submission, para 5.12(b). This prospect comprises an exploration licence (E45/2908-I) which was granted to Jupiter Mines in June 2007 (Jupiter Mines Quarterly Report June 2007).

<sup>67</sup> Jupiter Mines Annual Report 2007, page 8; See also Jupiter Mines Presentation, "Project Summary AGM 2007", dated November 2007.

*"Polaris Metals NL holds an exploration licence over an area of around 120 square kilometres approximately 100 kilometres east of Port Hedland. Exploration activity is not sufficiently advanced to be able to estimate potential rates of production."*<sup>68</sup>

- 10.10 Polaris has made the following public announcements in relation to the Goldsworthy JV prospect:
- (a) The Goldsworthy JV prospect comprises the 120km<sup>2</sup> exploration licence E45/2358-I, which is contiguous with BHPBIO's Mt Goldsworthy mining leases, 95km east of Port Hedland;<sup>69</sup> and
  - (b) the Goldsworthy JV prospect is located "within 1km of the Great Northern Highway."<sup>70</sup>
- 10.11 Polaris has not stated whether it proposes to use road haulage or other transportation means to transport ore from mine to port.

**API - Mount Grant iron ore prospect**

- 10.12 The Goldsworthy Supplementary Submission states:

*"[API] holds an exploration licence over an area just south of BHPB's Mt Goldsworthy mine, but exploration activity has not been sufficiently advanced to enable an estimation of potential rates of production."*<sup>71</sup>

- 10.13 API has not reported any exploration results in relation to the Mount Grant prospect and has not stated whether it proposes to use road haulage or other transportation means to transport ore from mine to port.
- 10.14 However, the Mount Grant prospect is located only approximately 85km from Port Hedland. A road runs through the prospect to the Great Northern Highway, which is only about 5km from the prospect site.

**Palmary - Woodie Woodie manganese project**

- 10.15 The Goldsworthy Supplementary Submission states:

*"Woodie Woodie currently produces around 900,000 tonnes of manganese per year and the mine site has a capacity of around 1Mtpa."*<sup>72</sup>

- 10.16 The following public announcements have been made in relation to the Woodie Woodie manganese project:
- (a) mining operations for manganese commenced at Woodie Woodie in May 1999;<sup>73</sup>
  - (b) in the financial year ending June 07, the Woodie Woodie manganese project produced over 900,000 tonnes of manganese;<sup>74</sup>

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<sup>68</sup> Goldsworthy Supplementary Submission, para 5.12 (c).

<sup>69</sup> Polaris ASX Announcement, "Goldsworthy Exploration Update", dated 14 June 2006.

<sup>70</sup> Polaris ASX Announcement, "Goldsworthy Exploration Update", dated 14 June 2006.

<sup>71</sup> Goldsworthy Supplementary Submission, para 5.12 (d).

<sup>72</sup> Goldsworthy Supplementary Submission, para 5.12 (e).

<sup>73</sup> ConsMin, Annual Report 2007, page 20.

- (c) the Woodie Woodie manganese project is located approximately 400km by road southeast of Port Hedland,<sup>75</sup> and is 125km south east of the rail head of the Goldsworthy Railway Line; and
- (d) road trains are used to transport lump and fines product 400km from the processing plant to stockpile storage areas at the current Port Hedland public berth.<sup>76</sup>

10.17 BHPBIO understands that the manganese from the Woodie Woodie project is transported by road, first on a 360km purpose built new bitumen road<sup>77</sup> and then along a 40km gravel road.

### Summary

10.18 A summary of the proposed tonnage and road distance details for each of these projects and prospects is set out in the table below:

Para	Company	Project/Prospect	Tonnage (mtpa)	Distance from mine to port by road (km)
5.12 (a)	Atlas	Pardoo	1-3	75
5.12 (b)	Jupiter Mines	Shay Gap	-	180
5.12 (c)	Polaris	Goldsworthy JV	-	95
5.12 (d)	API	Mount Grant	-	85
5.12 (e)	Palmary	Woodie Woodie	0.9	400

10.19 **Annexure 10** is a map showing the location of each of the above projects and prospects and their proximity to the Goldsworthy Railway Line, public road facilities, the Chichester Railway Line and port facilities at Port Hedland.

10.20 BHPBIO has commissioned a consultant geologist, Richard Harmsworth, to provide an opinion of the prospectivity and operations of the above projects/prospects on the basis of public announcements. A copy of Mr Harmsworth's report is **Annexure 11**.

### Transportation of ore by road

#### Overview

10.21 The transportation of ore by road is commonplace. Many mining companies in Western Australia transport, or propose to transport, ore by road from mine to port over distances that are comparable to the distances over which the five projects/prospects identified by TPI are transporting, or would be required to transport, ore to port facilities at Port Hedland, and in some instances over distances substantially greater than the entire length of the Goldsworthy Railway Line.

<sup>74</sup> ConsMin, Annual Report 2007, page 20.

<sup>75</sup> ConsMin, Annual Report 2007, page 20.

<sup>76</sup> ConsMin, Annual Report 2007, page 20; ConsMin, Annual Report 2001, page 5-6.

<sup>77</sup> BHPBIO understands that the WA Government funded the construction of this road on the basis of a payback system by various beneficiary users.

***Transport from mine to port***

- 10.22 The following mining companies transport, or propose to transport, iron ore by road from mine to port:
- (a) Murchison transports 1-2mtpa from its Jack Hill project to Geraldton port, a distance of approximately 600km;<sup>78</sup>
  - (b) Midwest transports 1mtpa from its Koolanooka project to Geraldton port, a distance of approximately 200km;<sup>79</sup> and
  - (c) Atlas proposes to transport:
    - (i) 3mtpa from its Abydos project to Port Hedland, a distance of 125km;<sup>80</sup> and
    - (ii) 4mtpa from its Mid West project to Geraldton port, a distance of over 500km.<sup>81</sup>

***Transport from mine to rail to port***

- 10.23 The following mining companies transport or propose to transport iron ore by road haulage from mine to a railway siding and then by rail haulage from that railway siding to port:
- (a) Mt Gibson produces and exports 2mtpa of iron ore from its Tallering Peak project in the mid-west region of WA.<sup>82</sup> This involves:
    - (i) transporting the ore by road from the Tallering Peak project to Mullewa, a distance of approximately 65km; and
    - (ii) WestNet Rail transporting the ore by rail haulage on the Geraldton Mullewa Perenjori Railway Link to Geraldton port, a distance of 105km.<sup>83</sup>
  - (b) Mt Gibson proposes to produce and export approximately 3mtpa from its Extension Hill project. This proposal would involve:
    - (i) transporting the ore by road from the Extension Hill project to Perenjori, a distance of 85km; and
    - (ii) WestNet Rail transporting the ore by rail haulage on the Geraldton Mullewa Perenjori Railway Link to Geraldton port, a distance of 240km.<sup>84</sup>
  - (c) BC Iron proposes to produce and export ore from its Nullagine iron ore project. This proposal would involve:

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<sup>78</sup> Murchison Quarterly Activities Report June 2007; Murchison Quarterly Activities Report December 2007.

<sup>79</sup> Midwest 2006 Annual Report page 6; see also Midwest presentation to 11th Annual Iron Ore and Steel Forecast Conference, dated 12 March 2008. Midwest proposes to ramp up production to 1.5mtpa in 2009.

<sup>80</sup> Atlas Presentation, "The Right Place and the Right Time", dated February 2008.

<sup>81</sup> Atlas Presentation, "The Right Place and the Right Time", dated February 2008.

<sup>82</sup> In September 2007, production from the Tallering Peak project increased to 3mtpa (Mt Gibson 2007 Annual Report, page 8).

<sup>83</sup> Mt Gibson 2006 Annual Report, page 5.

<sup>84</sup> Mt Gibson, "31 December 2007 Half-year Financial Statements", dated 13 February 2008.

- (i) transporting the ore by road from the Nullagine project to Cloud Break, a distance of 65km; and
  - (ii) TPI transporting the ore by rail on the Chichester Railway Line from Cloud Break to Port Hedland, a distance of 260km.<sup>85</sup>
- (d) Gindalbie proposes to produce and export 2-3mtpa of iron ore from its Karara iron ore project by early 2009.<sup>86</sup> This proposal would involve:
- (i) transporting the ore by road from the Karara Iron Ore project to Morawa, a distance of 85-90km; and
  - (ii) WestNet Rail transporting the ore by rail haulage on Geraldton Mullewa Perenjori Railway Link from Morawa to Geraldton port, a distance of 200km.<sup>87</sup>
- (e) Golden West proposes to produce and export 1mtpa of iron ore from its Wiluna West project. This proposal would involve:
- (i) transporting the ore by road from its Wiluna West project to Leonora, a distance of approximately 320km; and
  - (ii) transportation of the ore by rail on the Transcontinental railway from Leonora to the port at Esperance, a distance of 650km.<sup>88</sup>

### Summary

10.24 A summary of the mining companies in Western Australia who transport or propose to transport iron ore by road, or road and rail, from mine to port is set out in the table below:

Company	Project/Prospect	Tonnage (mtpa)	Transport - Distance (km)			Total (km)
			Mine-Port (by road)	Mine-Rail (by road)	Rail-Port (by rail)	
Murchison	Jack Hill	1-2	600	-	-	600
Midwest	Koolanooka	1	200	-	-	200
Atlas	Abydos	3	125	-	-	125

<sup>85</sup> BC Iron ASX Announcement "Brokers Presentation", dated 2 April 2008; BC Iron Broker and Investor Presentation, "The Time, The Place, The Metal", dated April 2008. BC Iron is seeking to agree commercial terms with TPI under which TPI would transport ore produced from BC Iron's Nullagine project by rail haulage from Cloud Break to Port Hedland on the Chichester Railway Line: BC Iron ASX announcement, "BC Iron Signs MoU with Fortescue Metals Group Ltd", dated 6 July 2007.

<sup>86</sup> Gindalbie 2007 Annual Report, page 13.

<sup>87</sup> Gindalbie Quarterly Activities Report, September 2007. Gindalbie intends to transport ore in this manner for the first 15 months of production after which it proposes to transport ore only by means of rail only subject to negotiations with WestNet Rail for the development of a rail transport solution: Gindalbie Quarterly Activities Report, December 2007; Gindalbie Quarterly Activities Report, September 2007.

<sup>88</sup> Golden West Quarterly Activities Report March 2007. More recently, Golden West has stated that production from its Wiluna West project may increase to 10mtpa. In accordance with this increase, Golden West is evaluating a proposal to construct a new railway (from Wiluna West to south of Meekatharra at Weld Range) which will connect to the proposed Midwest regional rail system. The distance of the new railway line would be approximately 280km and the distance from where it connects to the proposed Midwest regional rail system to Oakajee Port would be a distance of approximately 420km (Golden West Quarterly Activities Report September 2007).

Company	Project/Prospect	Tonnage (mtpa)	Transport - Distance (km)			Total (km)
			Mine-Port (by road)	Mine-Rail (by road)	Rail-Port (by rail)	
Atlas	Mid West	4	500	-	-	500
Mt Gibson	Talling Peak	2	-	65	105	170
BC Iron	Nullagine	-	-	65	260	325
Gindalbie	Karara Iron Ore	1.5 - 2	-	90	200	290
Golden West	Wiluna West	1	-	320	650	970

### Construction of new railway lines

- 10.25 The construction of a number of new railways for the transportation of iron ore and other minerals from mine to port in Western Australia has been proposed:
- (a) Fortescue has constructed the Chichester Railway Line, a distance of approximately 260km, primarily to service its Chichester Ranges project;<sup>89</sup>
  - (b) Fortescue proposes to construct the Kennedy Railway Line, a distance of approximately 240km, primarily to service its Solomon project and other potential mines in the area;<sup>90</sup>
  - (c) Red Hill Iron and API propose to construct a railway line from their respective iron ore projects in the western Pilbara region<sup>91</sup> to either Cape Preston or Dixon Island or both, a distance of approximately 160km;<sup>92</sup>
  - (d) Golden West proposes to construct a railway line from its Wiluna West project to south of Meekatharra at Weld Range and then joining the proposed Mid-West rail network, a distance of approximately 280km;<sup>93</sup> and
  - (e) a number of parties propose to tender for the construction of the Mid-West rail network, a 470km railway from Wiluna West to Oakajee port (including connections to Jack Hills and Extension Hill), as well as construction of a deepwater port at Oakajee:
    - (i) Midwest may partner with Yilgarn Infrastructure and has reported that "[m]ajor Chinese infrastructure developers and iron-ore purchasers [are] committed to half \$750m equity";<sup>94</sup> and

<sup>89</sup> Fortescue ASX Announcement, "Rail Complete to Cloudbreak", dated 8 April 2008.

<sup>90</sup> Robe River Application (para 8.43) and Hamersley Supplementary Submission (para 6.41).

<sup>91</sup> Projects in which Red Hill Iron has an interest are known as House Creek, Hardey and the Cullen JV. Projects in which API has an interest are Mt Stuart, Mt Elvire and Yalleen. Both companies have an interest in the Red Hill project.

<sup>92</sup> Aquila BMO Capital Markets Global Resources Conference Presentation, dated 26 February 2008; see also Red Hill Iron, Activities Report for the Quarter ended 31 December 2007.

<sup>93</sup> Golden West Quarterly Activities Report September 2007, page 6.

<sup>94</sup> Midwest presentation to 11th Annual Iron Ore and Steel Forecast Conference, dated 12 March 2008.

- (ii) Oakajee Port & Rail, a joint venture between Murchison and the Australian subsidiary of Japanese industrial group Mitsubishi Corp, Mitsubishi Development Pty Ltd, also proposes to tender.<sup>95</sup>

### Other arrangements

#### ***Arrangements with Fortescue or the Applicant in relation to the Chichester Railway Line***

- 10.26 Mining companies with projects or prospects in the vicinity of the Chichester Railway Line may be able to develop and exploit their iron ore projects or prospects by entering into commercial arrangements with Fortescue or TPI:
- (a) BC Iron proposes to develop and exploit its Nullagine project by:
    - (i) entering into an arrangement with Fortescue under which BC Iron would transport ore to Cloud Break by road and TPI would transport the ore to port facilities at Port Hedland by rail haulage on the Chichester Railway Line;<sup>96</sup> or
    - (ii) entering into a joint venture arrangement with Fortescue or another purchaser;<sup>97</sup> or
    - (iii) entering into a minegate sale or other arrangement with Fortescue or another purchaser.<sup>98</sup>
  - (b) Brockman proposes to develop and exploit its Marillana iron ore project. One of the options it is considering is:
    - (i) constructing a rail spur from Marillana to Cloud Break, a distance of approximately 35km; and
    - (ii) entering an arrangement with Fortescue or TPI under which TPI would transport ore to port facilities at Port Hedland by rail haulage on the Chichester Railway Line.<sup>99</sup>
  - (c) FerrAus proposes to develop and exploit its Robertson Range project. One of the options FerrAus is considering is use of the Chichester Railway Line. FerrAus has stated the following in relation to the Chichester Railway Line:
    - *FMG rail approved & under construction = shipments Q3-4'08*
      - ✓ *3rd party access guaranteed*
      - ✓ *Trucking to rail head is possible*

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<sup>95</sup> Murchison ASX Announcement, "WA Government invites proposal on mid-west infrastructure," dated 4 March 2008.

<sup>96</sup> BC Iron has entered a memorandum of understanding with Fortescue under which it is seeking to agree commercial terms for TPI to transport ore produced from BC Iron's Nullagine project by rail haulage from Cloud Break to Port Hedland on the Chichester Railway Line: BC Iron ASX announcement, "BC Iron Signs MoU with Fortescue Metals Group", dated 6 July 2007; BC Iron ASX Announcement "Brokers Presentation", dated 2 April 2008; BC Iron Broker and Investor Presentation, "The Time, The Place, The Metal", dated April 2008.

<sup>97</sup> BC Iron Broker and Investor Presentation, "The Time, The Place, The Metal", dated April 2008.

<sup>98</sup> BC Iron Broker and Investor Presentation, "The Time, The Place, The Metal", dated April 2008.

<sup>99</sup> Brockman ASX Announcement, "Positive scoping study indicates potential A\$1B NPV for 10Mtpa Marillana Project", dated 16 April 2008; ; Brockman Presentation, "AGM Presentation", dated 5 November 2007.

- ✓ *Cost structure is available*
- ✓ *FMG keen to source high grade ores.*<sup>100</sup>

(d) Baosteel Trading Co Ltd proposes to explore and develop an area between Cloud Break and Port Hedland, known as Glacier Valley. In order to do so, it has entered a joint venture memorandum of understanding with Fortescue.<sup>101</sup>

#### **Arrangements with BHPBIO in relation to the Mt Newman Railway Line**

10.27 Mining companies with projects or prospects in the vicinity of the Mt Newman Railway Line may be able to develop and exploit their iron ore projects or prospects by entering commercial arrangements with BHPBIO:

(a) FerrAus proposes to develop and exploit its Robertson Range project. One of the options FerrAus is considering is use of the Mt Newman Railway Line. FerrAus has stated that its project is "60 kilometres south east of BHP Billiton's mining operations and rail infrastructure at Jimblebar"<sup>102</sup> and that it is considering the following options:

- *Ore sales at mine gate or rail head*
- *Co-operative development*
- *Rail haulage service under State Rail Agreement.*<sup>103</sup>

(b) in relation to the Mindy Mindy prospect, Fortescue is able to acquire a rail haulage service from BHPBIO pursuant to the RTA once the project is sufficiently advanced;<sup>104</sup> and

(c) Brockman is examining a number of options for the development and exploitation of its Marillana iron ore project including haulage on the Mt Newman Railway Line. Brockman has recently stated that it is considering:

*"The utilisation of the BHP Billiton rail system, accompanied by the full funding of a car dumper (unloader) at Port Hedland."*<sup>105</sup>

#### **Proposed New Rail Haulage Regime**

10.28 In May 2006, the Honourable Eric Ripper, Deputy Premier and Treasurer of the State of Western Australia, wrote to the Honourable Peter Costello, who at that time was the Treasurer of the Commonwealth Government of Australia. In that letter, Mr Ripper stated:

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<sup>100</sup> FerrAus, UBS Iron Ore Presentation, "From Iron Ore Explorer 2006 To Developer 2007 To Producer 2008" Sydney, March 2007

<sup>101</sup> Fortescue ASX Announcement, "Long Term Off-take Agreement and MoU with Baosteel Trading Co Ltd" (dated 26 March 2007).

<sup>102</sup> FerrAus 2007 Annual Report, page 9.

<sup>103</sup> FerrAus Company Presentation, dated 14 March 2008.

<sup>104</sup> There are a range of other options available to Fortescue in relation to the development and exploitation of the Mindy Mindy prospect. While it has previously considered extending the Chichester Railway Line to Mindy Mindy, it could also transport ore by road haulage either to Cloud Break or the Hunter siding and then transport the ore on the Chichester Railway Line to TPI's port facilities at Anderson Point.

<sup>105</sup> Brockman ASX Announcement, "Positive scoping study indicates potential A\$1B NPV for 10Mtpa Marillana Project", dated 16 April 2008.

*"... the State recently commenced discussions with BHP Billiton (BHPB) with a view to the parallel development of a State-based access arrangement for haulage services, capable of being certified under Part IIIA of the Commonwealth's Trade Practices Act 1974 (TPA).*

*BHPBIO has now indicated that it is prepared to work immediately with the Western Australian Government, in good faith, to develop a State-based access regime for haulage services, with the objective of making it certifiable under Part IIIA of the TPA. The Western Australian Government and BHPBIO will in the first instance investigate modifying the State's existing Rail Transport Agreement to achieve this objective."*

- 10.29 A copy of this letter is **Annexure 12**.
- 10.30 BHPBIO has engaged with the Western Australian Government on the basis outlined in Mr Ripper's letter, and has negotiated in good faith with the Pilbara Rail Access Interdepartmental Committee since its first formal meeting with the Committee on 4 September 2006. Discussions with the Committee are continuing and the next step is expected to be public consultation.

## **11. THE PORT OF PORT HEDLAND**

### **Port facilities identified by the Applicant**

- 11.1 The Applicant has identified the following port facilities as potential destination points in relation to the rail haulage services it would provide on the Goldsworthy Railway Line:<sup>106</sup>
- (a) the Goldsworthy JV's port facilities at Finucane Island;
  - (b) the Mt Newman JV's port facilities at Nelson Point;
  - (c) the Applicant's port facilities at Anderson Point;
  - (d) new public port facilities proposed to be constructed at Utah Point;
  - (e) port facilities that could be constructed at Harriet Point by BHPBIO, TPI or another party; and
  - (f) port facilities that could be constructed by TPI or another party in the South West Creek.
- 11.2 **Annexure 13** is a map of the port of Port Hedland.

### **BHPBIO's port facilities**

- 11.3 The Goldsworthy JV's port facilities at Finucane Island and the Mt Newman JV's port facilities at Nelson Point are described above.
- 11.4 Third parties will not be able to use these port facilities as they are fully utilised, and will be fully utilised for the foreseeable future.

### **Fortescue/the Applicant's port facilities**

- 11.5 The Applicant's port facilities at Anderson Point have been described above.

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<sup>106</sup> Goldsworthy Application, para 3.9.

## Public port facilities

### *Nelson Point*

- 11.6 Public berth facilities are located adjacent to the Mt Newman JV's port facilities at Nelson Point. These public berth facilities are on the western side of the township of Port Hedland.
- 11.7 The public berth facilities at Nelson Point consist of number 1, 2 and 3 public berths:
- (a) Public berth 1 was built in the 1970s and is currently used to export approximately 2.5mtpa of products (manganese, chrome and copper). Public berth 1 is also used to import heavy material and equipment such as rail and ore cars.
  - (b) Public berth 2 is an extension of public berth 1. The construction of the extension was completed in 2004.
  - (c) Public berth 3 was constructed as a joint venture between the participants in the Newman JV, the State Government and Dampier Salt and can be used for general unloading, though this is restricted by the salt loading gantry on the berth which prevents the unloading of bulky general cargo.<sup>107</sup>

### *Utah Point*

- 11.8 Utah Point is on the western perimeter of Port Hedland harbour.
- 11.9 The PHPA is proposing to construct a new public berth at Utah Point. The PHPA proposes that the new berth will primarily be used for the bulk export of iron ore, manganese and chrome. Salt and copper is proposed to continue to be exported from the public berths at Nelson Point and, over time, it is anticipated that salt and copper will utilise all of the capacity of those berths.
- 11.10 The PHPA has indicated that the capacity of the public berth at Utah Point is proposed to be approximately 16-18 mtpa. All but 1.5 mtpa of that capacity is proposed to be used for the export of iron ore. The remaining capacity is proposed to be used for the export of manganese and chrome.
- 11.11 Fortescue has stated that it may build a dedicated ore conveyor connecting the Applicant's unloading and port facilities at Anderson Point to the public port facilities planned for Utah Point.
- 11.12 Fortescue has reportedly stated that the proposed conveyor would be beneficial because:<sup>108</sup>
- (a) the Anderson Point berth could load Cape-size vessels, while shipments destined for Fortescue's smaller customers could be loaded onto Panamax vessels at the public wharf at Utah Point;
  - (b) conveyor access to the public wharf would give Fortescue additional loading capacity during any expansion or maintenance work at its own facilities; and
  - (c) emerging miners were more likely to use smaller Panamax vessels.

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<sup>107</sup> As a result of the part financing provided by Dampier Salt, Dampier Salt has first use of public berth 3 for 120 days per year.

<sup>108</sup> John Phaceas, "FMG offers to help on ore port upgrade", The West Australian, dated 18 January 2007.

## **Other facilities**

### ***Harriet Point***

- 11.13 There are no port facilities at Harriet Point.
- 11.14 BHPBIO understands that the PHPA is currently considering a number of options for potential port facilities at Harriet Point.

### ***South West Creek***

- 11.15 There are no port facilities in South West Creek.
- 11.16 BHPBIO understands that the PHPA has raised the possibility of port facilities being constructed at South West Creek but that any consideration of such facilities is at a very early stage.

## **12. THIRD PARTY ACCESS SCENARIOS**

### **Overview**

- 12.1 The Council should undertake its consideration of whether the declaration criteria under s44G(2) are satisfied only by reference to those scenarios of third party access that have a sufficient degree of certainty.<sup>109</sup>

### **Infinite scenarios for "all points" service**

- 12.2 Ostensibly, the Applicant wishes to use the Goldsworthy Railway Line in order to be able to offer rail haulage services to mining companies seeking to move bulk minerals between any two points on the Goldsworthy Railway Line and between any point on the Goldsworthy Railway Line and another railway line.<sup>110</sup>
- 12.3 The "any two points" on the Goldsworthy Railway Line between which the Applicant seeks access can be summarised as follows:
- (a) any point on the Goldsworthy Railway Line near a mine site to any other point on the Goldsworthy Railway Line near another mine site (that is, between mine sites); or
  - (b) any point on the Goldsworthy Railway Line near a mine site to any other point on the Goldsworthy Railway Line near processing facilities (that is, between mine site and processing facilities); or
  - (c) any point on the Goldsworthy Railway Line near a mine site to port facilities at Port Hedland (that is, between mine and port); or
  - (d) any point on the Goldsworthy Railway Line near processing facilities to port facilities at Port Hedland (that is, between processing facility and port);<sup>111</sup> or
  - (e) any point on the Goldsworthy Line near a mine site or processing facilities to any other point on the Goldsworthy Railway Line at which any potential railway could

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<sup>109</sup> The Hilmer Report states that "[t]he Committee is conscious of the need to carefully limit the circumstances in which one business is required by law to make its facilities available to another" and accordingly "[i]n practice... such a regime should be applied sparingly" (pages 248 and 260).

<sup>110</sup> Goldsworthy Application, para 3.4.

<sup>111</sup> Goldsworthy Application, paras 3.5, 3.6 and 3.9.

be connected (that is, mine or processing facility to interconnection point of another proposed railway line).

- 12.4 In relation to the haulage of third party<sup>112</sup> ore to port facilities at Port Hedland, the Applicant has stated that the destination point could be any one or more of the following port facilities:<sup>113</sup>
- (a) the Goldsworthy JV's port facilities at Finucane Island;
  - (b) the Mt Newman JV's port facilities at Nelson Point;
  - (c) the Applicant's port facilities at Anderson Point;
  - (d) port facilities proposed to be constructed by the PHPA at Utah Point;
  - (e) port facilities that might be constructed at Harriet Point by either BHPBIO, TPI or another party; or
  - (f) port facilities that might be constructed by TPI or another party in the South West Creek.
- 12.5 The alternatives for use of the Goldsworthy Railway Line described above involve an infinite number of scenarios for the potential carriage of third party ore on the Goldsworthy Railway Line, because there is no certainty as to:
- (a) the origin and destination points of access;
  - (b) the distance third party ore will be hauled by TPI; or
  - (c) the direction in which third party ore will be hauled by TPI.
- 12.6 The application of the declaration criteria required by s44G(2) is virtually impossible in these circumstances given the infinite and uncertain scenarios of third party access.

**Currently identified scenarios**

- 12.7 The Applicant has stated that it may wish to provide a rail haulage service on the Goldsworthy Railway Line for the following projects and prospects, should they proceed:
- (a) 3mtpa of iron ore for Atlas from its Pardoo iron ore project to proposed port facilities at Utah Point;<sup>114</sup>
  - (b) 1mtpa of manganese for Palmary from its Woodie Woodie manganese project (presumably to proposed port facilities at Utah Point);<sup>115</sup>
  - (c) unknown quantities of iron ore for each of Jupiter Mines, Polaris and API from their respective prospects, Shay Gap, Goldsworthy JV and Mount Grant;<sup>116</sup> and

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<sup>112</sup> While the term "third party" is generally used to describe access seekers under Part IIIA (ie. in this case, TPI), where relevant it is used in this submission to describe those mining companies or prospects/projects that may seek to acquire rail haulage services from TPI.

<sup>113</sup> Goldsworthy Application, para 3.9.

<sup>114</sup> Goldsworthy Supplementary Submission, para 5.12 (a).

<sup>115</sup> Goldsworthy Supplementary Submission, para 5.12 (e).

<sup>116</sup> Goldsworthy Supplementary Submission, para 5.12 (b), (c) and (d).

- (d) 10mtpa of iron ore from the Mindy Mindy region (5mtpa from the Mindy Mindy prospect and 5mtpa from other possible project(s) in that area) from the Goldsworthy Junction to Fortescue/TPI's port facilities at Anderson Point.<sup>117</sup>

12.8 BHPBIO considers that the scenarios of third party access for Jupiter Mines, Polaris and API should not be taken into account by the Council in considering the application of the declaration criteria under s44G(2) because these prospects are too speculative and accordingly do not exhibit a sufficient degree of certainty. The Applicant itself has stated that "the exploration activity conducted by these companies is not sufficiently advanced to be able to estimate potential rates of production".<sup>118</sup>

### 13. COSTS OF THIRD PARTY ACCESS

#### Summary

13.1 The costs of third party access to the Goldsworthy Railway Line include:

- (a) the capital costs of expanding the Goldsworthy Railway Line to cater for additional third party tonnage;
- (b) the costs of managing and responding to the regulatory process under Part IIIA;
- (c) the costs associated with loss of production due to:
  - (i) the loss of operational flexibility on both the Goldsworthy Railway Line and the Mt Newman Railway Line; and
  - (ii) operational failures of, and due to, third parties;
- (d) deterring or delaying rail optimisation, including deferral or delay to the introduction of new technology or operating procedures on both the Goldsworthy Railway Line and the Mt Newman Railway Line;
- (e) deterring or delaying investment in BHPBIO's iron ore export infrastructure due to regulatory process and/or regulatory error;
- (f) the environmental costs resulting from increased train movements near townships and residential areas; and
- (g) the opportunity costs of foregone facilities-based competition.

#### Capital cost of expanding the Goldsworthy Railway Line

13.2 The capital cost of expanding the Goldsworthy Railway Line to accommodate third party use would, at the very least, involve the cost of double tracking the Finucane Island section.

13.3 As explained above, there are substantial impediments to double tracking the Finucane Island section.

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<sup>117</sup> In Mt Newman Final Recommendation, the Council held that if the service provided by the Mt Newman Railway Line were to be declared, the demand for that service from third parties would be 10mtpa (5mtpa from the Mindy Mindy prospect and 5mtpa from other possible project(s) in that area). The Tribunal proceedings are currently proceeding on this basis. There is nothing in the Goldsworthy Application or the Goldsworthy Supplementary Submission that suggests that these findings should be changed.

<sup>118</sup> Goldsworthy Supplementary Submission, para 5.12 (b), (c) and (d).

- 13.4 The capital cost of double tracking the Finucane Island section, if it were to be feasible, would be in the order of \$100-120 million. However, there are a number of issues associated with double tracking the Finucane Island section:
- (a) there is no available land to double track the Finucane Island section on the south side of the present line due to the location of the Boodarie workshop. Accordingly, the Finucane Island section would have to be double tracked on the north side of the present line;
  - (b) there are a number of hydrological challenges associated with double tracking the Finucane Island section and substantial expenditure would be required to overcome such challenges. For example, there would be costs associated with resolving flood level issues that a double tracked Finucane Island section would cause by having to traverse South West Creek;
  - (c) there are a number of environmental issues associated with double tracking the Finucane Island section, such as noise and dust pollution. Further, a double tracked Finucane Island section would cross two public roads, resulting in increased traffic congestion and interference;<sup>119</sup> and
  - (d) other types of infrastructure such as gas pipelines, electricity lines, water pipes and a major road exist in close proximity to the Finucane Island section.<sup>120</sup> Ensuring that these infrastructure networks were not disturbed by double tracking would involve costs.

#### **Regulatory costs**

- 13.5 The costs of the regulatory process under Part IIIA include not only the direct costs of processes imposed by the access regime and regulators but also involve substantial opportunity costs for the infrastructure owner and operator.
- 13.6 In light of the vast range of issues that can arise in access disputes (including operational conditions, access charges, maintenance issues, investment in rail technology and expansions to infrastructure), the availability of appeal mechanisms and the opportunity to "game" the system, the costs of regulation are likely to be very significant.
- 13.7 Many senior personnel at BHPBIO have already spent considerable time responding to the regulatory process in place of managing and expanding the BHPBIO iron ore business.

#### **Loss of production**

- 13.8 Third party access will result in a loss of operational flexibility on both the Goldsworthy Railway Line and the Mt Newman Railway Line. BHPBIO will be restricted in its ability to adjust its rail operations within real time to capitalise on circumstances of high demand spikes. This will result in a loss of production – a significant cost given current prices for iron ore. There also may be indirect costs relating to reduced reliability of supply.
- 13.9 Third party access will also result in third party operational failures from time to time. This, in turn, will lead to loss of production.

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<sup>119</sup> It is unlikely that bridges could be constructed for the double track line over the road crossings. This is because bridges require considerable distance before and after the bridge so as to provide a gradual ascent and descent for heavy trains. The length of the Finucane Island section, however, is too short for a bridge to be constructed in this way. It may be the case, however, that the public roads are transformed into road bridges which could allow traffic over the railway line. The cost of road bridges would be considerable.

<sup>120</sup> As TPI has recognised, it would be very difficult to construct another railway line between the Goldsworthy Junction and Finucane Island given the lack of available land (Goldsworthy Application, para 5.23).

### **Deterring or delaying optimisation of rail operations**

- 13.10 Third party access will deter or delay optimisation of railway operations because there will be no incentive for third parties with smaller operations to agree to investments in new technologies or innovative operating practices.
- 13.11 Given that BHPBIO is likely to have different commercial objectives to TPI and other users, the implementation of new railway technologies and operating practices will be deterred or delayed through the need for consultation, lack of agreement and regulatory intervention.

### **Deterring or delaying efficient investment**

- 13.12 For similar reasons, third party access will deter or delay investments in export infrastructure. TPI and other users will not have the same commercial incentives as BHPBIO in the expansion of BHPBIO's integrated production and export system.
- 13.13 Failure to expand in a timely manner to meet the global increase in demand for iron ore will result in substantial opportunity costs. In this respect, the Applicant will be able "game" the regulatory process for its own ends. This will increase the potential for regulatory error, inefficient investment and opportunity costs.
- 13.14 The ACCC's recent authorisation of the temporary continuance of a capacity balancing system for the Port of Newcastle supports the proposition that access will reduce the incentive to invest in infrastructure.<sup>121</sup>
- 13.15 In authorising a capacity balancing system to address the imbalance in demand for coal loading facilities at the Port of Newcastle and the capacity of the Hunter Valley coal chain, the ACCC indicated that its primary concerns with the system were that:
- (a) the common user obligations restricted the environment underpinning long term investment in infrastructure; and
  - (b) the focus on individual or component capacity without reference to the coal chain as a whole or system capacity resulted in the imbalance.
- 13.16 The ACCC ultimately found that, if implemented in the long term, the system would:
- (a) reduce incentives to invest and lead to the inefficient use of infrastructure; and
  - (b) generate a significant public detriment involving "several billion dollars in lost export revenue".
- 13.17 **Annexure 14** contains an analysis of the potential costs to BHPBIO of delays to investment due to access regulation. This analysis concludes that the cost to BHPBIO alone of delays to investment caused by access would be in excess of **\$4.6 billion**.

### **Environmental costs**

- 13.18 There are a number of environmental costs associated with double tracking the Finucane Island section and mandating third party use.
- 13.19 Third party use, if feasible, would result in an increase in train movements on the Finucane Island section that may be expensive to mitigate.<sup>122</sup>

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<sup>121</sup> ACCC, Authorisation Determination granted to Newcastle Port Corporation and Donaldson Coal Pty Limited in respect of a capacity balancing system to address the imbalance between the demand for coal loading services at the Port of Newcastle and the capacity of the Hunter Valley coal chain in 2008 (23 April 2008).

### Loss of facilities-based competition

- 13.20 Third party access will also reduce the incentive for companies to invest in export infrastructure and engage in facilities-based competition. Facilities-based competition would provide an incentive for an increase in production. Allowing use of another producer's railway line is likely to have a dampening effect on that party's production.
- 13.21 Accordingly, a further cost of mandatory third party access is the opportunity cost associated with reduced competition and the likelihood of diminished production.

### Multi-user systems vs single-user systems

- 13.22 There is a wealth of evidence that production and logistics systems which are integrated single-user systems under unified control are markedly more efficient than multi-user systems. Details of the diseconomies and inefficiencies associated with multi-user systems, particularly regulated multi-user systems, are set out in expert affidavits which are annexed to this submission.
- 13.23 **Annexure 3** is a non-confidential version of the affidavit of Michael Van Der Worp (not including annexures) affirmed on 14 December 2007 and filed in the Tribunal proceedings that examines the potential impact of third party access on BHPBIO's operations.<sup>123</sup>
- 13.24 **Annexure 15** is a non-confidential version of the affidavit (not including annexures) of Andrew Laurie Neal affirmed on 16 November 2007 and filed in the Tribunal proceedings, that also examines the potential impact of third party operations on BHPBIO's production and export system.<sup>124</sup>
- 13.25 **Annexure 16** is an affidavit of Stephen O'Donnell affirmed on 21 December 2007 and filed in the Tribunal proceedings, that examines the problems that arise in multi-user systems.
- 13.26 Most notably, as is explained in the affidavit of Stephen O'Donnell which is **Annexure 16**, 10 to 20% additional capacity is required to achieve the same level of throughput in a multi-user system as can be achieved in a single-user system.<sup>125</sup> The capital cost of installing infrastructure to create this additional capacity in the BHPBIO system would be in the order of billions of dollars.

### Impacts of regulation

- 13.27 Most significantly, the impact of regulation associated with third party access would:
- (a) have an adverse impact on Australia's global competitiveness in resources during a time of high demand;
  - (b) introduce economic inefficiencies in the operation and use of, and investment in, export infrastructure; and
  - (c) reduce social surplus for Australia.

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<sup>122</sup> It is unlikely that bridges could be constructed for the double track line over the road crossings. This is because bridges require considerable distance before and after the bridge so as to provide a gradual ascent and descent for heavy trains. The length of the Finucane Island section, however, is too short for a bridge to be constructed in this way. It may be the case, however, that the public roads are transformed into road bridges which could allow traffic over the railway line. This would require substantial expenditure.

<sup>123</sup> In particular, see paras 213 - 278.

<sup>124</sup> In particular, see paras 198 - 300.

<sup>125</sup> Para 25.

The reasons for, and evidence in support of, these impacts are detailed in the Report entitled "Regulation for the Future of Australia's Natural Resources Sector", which is **Annexure 1**.

## **SECTION D : SUBMISSIONS**

### **14. DECLARATION CRITERIA ARE NOT MET**

14.1 The Council cannot declare the Goldsworthy Service because the declaration criteria are not met, access would be inconsistent with the objects of Part IIIA and it would be economical to develop another facility that could provide part of the service.

#### **Declaration criteria**

14.2 The Council cannot declare a service unless it is satisfied that all of the criteria set out in s44G(2) of the TPA are met in relation to that service. These criteria include:

- (a) access to the Goldsworthy Service will not promote a material increase in competition in a dependent market;
- (b) it is economical to develop another facility to provide an integral part of the Goldsworthy Service; and
- (c) access to the service by third parties would be contrary to the public interest and the objects of Part IIIA.

### **14.3 Other considerations**

14.4 The Council must also have regard to the following matters in making its recommendation:

- (a) the objects of Part IIIA, namely, "to promote the economically efficient operation of, use of and investment in the infrastructure by which services are provided, thereby promoting effective competition in upstream and downstream markets";<sup>126</sup> and
- (b) whether it would be economical to develop another facility that could provide part of the service.<sup>127</sup>

### **15. NO MATERIAL INCREASE IN COMPETITION – CRITERION (a)**

#### **Principles to be applied**

15.1 Access to the service must be "essential"<sup>128</sup> to be able to compete in the relevant market and not simply preferable, more profitable or "merely convenient".<sup>129</sup>

15.2 An increase in competition requires an increase in "rivalrous behaviour" and "the nature and extent of rivalry in a given market".<sup>130</sup> It is more than the creation of more favourable conditions for market participants.

15.3 Parliament has recently inserted the words "a material increase in" into criterion (a)<sup>131</sup> because it considered that without this amendment, declarations resulting in only a marginal increase in competition might be made.<sup>132</sup>

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<sup>126</sup> ss44F(2)(b) and 44AA of the TPA.

<sup>127</sup> s44F(4) of the TPA.

<sup>128</sup> NCC Guide, Part B, para 5.1(b)

<sup>129</sup> Hilmer Report, p 251.

<sup>130</sup> *Re Queensland Co-operative Milling Association Ltd* (1976) 25 FLR 169, at 188. *Re Virgin Blue Airlines Pty Ltd* (2005) 195 FLR 242, at page 145.

- 15.4 While the Council has stated that the amendment simply confirms its approach and that of the Tribunal in interpreting criterion (a),<sup>133</sup> this interpretation is inconsistent with the Parliament's intention in introducing the amendment. The amendment requires that access promote competition to a magnitude greater than was previously considered necessary by the Council and the Tribunal under criterion (a).
- 15.5 Otherwise, there would have been no reason for Parliament to make the amendment, as the Council's interpretation of criterion (a) would have provided an adequate safeguard against declaration in circumstances where only a marginal increase in competition would result. Further, the fact that criterion (a) now requires competition to be promoted to a degree greater than that previously applied by the Council is consistent with the new objects inserted into Part IIIA.
- 15.6 Accordingly, a material increase in competition requires a significant and real change in the extent of rivalry in the dependent market. This change must be brought about as a result of the introduction of access. To be material, the increase in competition should also be commercially relevant and meaningful to the market in question.<sup>134</sup>

**No material increase in competition**

- 15.7 The Council cannot be satisfied that access to the Goldsworthy Railway Line will promote a material increase in competition in any dependent market for the following reasons:
- (a) the very small amounts of ore that might be produced by the projects and possible projects located near to the Goldsworthy Railway Line (which would total approximately **less than 1%** of the global iron ore market) could not have any appreciable effect on the extent of rivalry in the global iron ore market or any other relevant market;
  - (b) only one of the projects and possible projects identified by the Applicant has commenced operation (and this is a relatively low volume manganese project) and it has not been established that any other possible project located near the Goldsworthy Railway Line is economic or will be developed;
  - (c) transportation of ore by road to port facilities at Port Hedland is a viable alternative for the projects and possible projects located near to the Goldsworthy Railway Line;
  - (d) there is no evidence that the use of the Goldsworthy Railway Line is necessary for the development of any project or possible project located near to the Goldsworthy Railway Line;
  - (e) there is no spare capacity on the Finucane Island section of the Goldsworthy Railway Line, and there will not be any spare capacity for the foreseeable future;
  - (f) the Yarrie section of the Goldsworthy Railway Line is in relatively poor condition and it is unclear whether its current capacity is greater than 8mtpa;

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<sup>131</sup> *Trade Practices Amendment (National Access Regime) Act 2006* (Cth).

<sup>132</sup> Explanatory Memorandum to the *Trade Practices Amendment (National Access Regime) Act 2006* (Cth).

<sup>133</sup> National Competition Council, Final Recommendation, Application for declaration of service provided by the Tasmanian Railway Network, dated 14 August 2007. At para 5.15, the Council stated that the approach of the Council and the Tribunal "has always been that the promotion of competition in the dependent market has to be non-trivial".

<sup>134</sup> *Australian Gas Light Company v ACCC* (2003) 137 FCR 317 at para 388.

- (g) a substantial increase in the capacity of the Goldsworthy Railway Line would require a virtual rebuilding of the railway line;
- (h) it is not feasible to construct a railway line between the Finucane Island section of the Goldsworthy Railway Line and the Chichester Railway Line or the Applicant's train unloading facilities at Anderson Point;
- (i) there is no evidence that there will be any other train unloading facilities at Port Hedland available for use by projects or prospects located near the Goldsworthy Railway Line; and
- (j) all of the above reasons, where relevant, apply with respect to projects or possible projects located in the vicinity of Mindy Mindy.

**16. ECONOMICAL TO DEVELOP ANOTHER FACILITY TO PROVIDE THE SERVICE – CRITERION (b)**

**Principles to be applied**

- 16.1 In determining whether it is economical to develop another facility, the Council needs to be mindful of the recent amendments to the objects clause in Part IIIA and, specifically, the requirement to take into account the promotion of efficient investment in infrastructure.

***Meaning of "service"***

- 16.2 The Goldsworthy Application states:

*"No facility other than access to the Goldsworthy Railway could provide the same service as the service to which access is sought. No other facility serves the same route as the route of the Goldsworthy Railway."*<sup>135</sup>

- 16.3 This interpretation of criterion (b) is unduly narrow.
- 16.4 The word "service" in criterion (b) does not mean a service that is identical to the service which is sought to be declared. Rather, the word "service" means an equivalent or substitutable service.
- 16.5 Further, the consideration of whether another facility provides the service to which access is sought should not be restricted to the precise route of the service provided by the facility. Such an interpretation would not only defeat the objects of the TPA and Part IIIA but would be inconsistent with the Tribunal's decision in the *Sydney Airport* matter.<sup>136</sup> The Council itself has supported this interpretation.<sup>137</sup>
- 16.6 Accordingly, the question the Council must ask is whether it is economical for anyone to develop another facility that could provide a service which is functionally the same as the service to which access is sought.

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<sup>135</sup> Goldsworthy Application, para 7.1.

<sup>136</sup> In *Sydney Airport*, the Tribunal held that a second existing facility, the Sydney West airport, was not another facility for the purposes of criterion (b) because it was not an "effective substitute in an operationally sensible time scale for those seeking access" to the services that had been declared by the Minister in that case. While the relevant service in *Sydney Airport* did not have a "route" or origin and destination points, the Tribunal's remarks imply that a facility that provides a service that is an effective substitute for the service to which access is sought will constitute "another facility" for the purposes of criterion (b).

<sup>137</sup> Mt Newman Final Recommendation, para 7.120.

***Private investment test***

- 16.7 A private investment test is the appropriate approach to take to the interpretation of criterion (b). The question to be asked under the private investment test is whether it is commercially viable and practically feasible for anyone to develop another facility to provide the service. Naturally, this first involves a consideration of whether alternative facilities that could provide the service already exist.
- 16.8 It would be inconsistent with the objects of the TPA and Part IIIA to declare a service in circumstances where it is commercially viable and practically feasible to develop another facility to provide the service or where alternative facilities already exist which could provide the service.

***Social test***

- 16.9 The Council, however, has elected to apply a 'social', or natural monopoly, test in its consideration of criterion (b). Under this test the issue is whether a single facility can serve the entire range of reasonably foreseeable demand for a service and, if it can, whether it can do so at lower cost (from society's perspective) than two or more facilities.
- 16.10 In addition, section 44F(4) of the TPA compels the Council to consider whether it would be economical for anyone to develop another facility that could provide part of the service.
- 16.11 It is clear from the Explanatory Memorandum to the *Competition Policy Reform Act 1995*, which introduced Part IIIA to the TPA, that if the Council decides that it would be economical for anyone to develop a facility that could provide part of the service, it can decline to recommend declaration of the service as defined by the applicant. The Explanatory Memorandum also notes that:

*"The applicant could then seek declaration of the service redefined to exclude that part that is economical for someone to provide."*<sup>138</sup>

- 16.12 This approach has been recognised and accepted by the Council.<sup>139</sup>
- 16.13 The approach taken to the interpretation of criterion (b) in the Gans Report which has been submitted by the Applicant is of no assistance to the Council and is misconceived in a number of important respects.
- 16.14 BHPBIO has commissioned two economic expert reports commenting on the Gans Report. Copies of the reports obtained by BHPBIO are **Annexure 17** (Concept Economics) and **Annexure 18** (The Allen Consulting Group). Both of the reports conclude that the Gans Report excludes significant costs or sources of costs from its formulation of the net social benefit test.
- 16.15 The report prepared by Concept Economics observes that the formulation of the net social benefit test in the Gans Report is incorrect in that it excludes significant costs that would be incurred when access is imposed, namely regulatory and transaction costs.<sup>140</sup> Regulatory costs comprise the direct costs of regulation, being legal, administrative, compliance and monitoring costs (including the costs of resolving disputes) and the indirect costs of

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<sup>138</sup> Paragraph 180.

<sup>139</sup> NCC Guide, Part B, para 4.94; Final Recommendation, *Application by Virgin Blue for declaration of airside services at Sydney Airport*, dated November 2003, para 11.7.

<sup>140</sup> The Council has recognised that these costs are an important consideration to be taken into account : NCC Guide, Part B, paras 9.16 – 9.19.

regulation, being the inefficiencies caused by setting inappropriate terms and conditions of access (notably the distortion of investment decisions). Transaction costs arise because the operation of and investment in the railway must be coordinated between two (or more) parties with conflicting objectives, and includes such costs as:

- (a) the costs of negotiations between access provider and access seeker(s) to arrive at agreements;
- (b) delays and other costs that arise because one party's decisions may cause harm or bring benefits to other parties in a manner not envisaged by a contract between the relevant parties (economists call these effects 'externalities'); and
- (c) delays or even cancellation of line expansions or the introduction of innovative practices, since obtaining agreement to investment projects may entail prolonged and costly negotiations between the different parties (referred to as 'hold-up' risks).

16.16 The report prepared by The Allen Consulting Group concludes that:

*"At a high level of generality, Professor Gans' report is unexceptional, because his analysis says little more than if the net social benefits of access exceed the net social benefits of duplication, then access should be granted. If s.44G(b) of the Trade Practices Act really is meant to be interpreted as a social test, then his decision rule is really just an algebraic restatement of this definitional rule.*

*However, on closer inspection, Professor Gans' analysis leads the reader unjustifiably towards the conclusion that it is more likely than not that duplication is likely to be uneconomic, and hence the granting of access will be beneficial to the economy. This is because his analysis is static and underplays important sources of costs that are likely to arise under an access regime, including in particular the cost to the facility owner of extinguishing the option to take up for itself any spare capacity in its facility, under favourable future market conditions."*

#### **Another facility exists which provides the same service**

- 16.17 The Council cannot be satisfied that it is uneconomical for anyone to develop another facility to provide the same service as the Goldsworthy Service because there is already another facility which provides the same service and does so economically.
- 16.18 It is economically feasible for any of the projects and possible projects located near the Goldsworthy Railway Line which have been identified by the Applicant as possible users of the Goldsworthy Service and which are, or turn out to be, economic, to transport their ore from their mines to port facilities at Port Hedland by road.
- 16.19 There are, in fact, logistical advantages with the use of road transportation in that it provides users with the flexibility to use any of the port facilities that might be available at Port Hedland from time to time, and to change the port facilities that are used as circumstances and availability change.

#### **Another facility which provides part of the same service**

- 16.20 The Council should recommend against declaration of the Goldsworthy Service because it is economical to develop another facility which provides an integral part of the same service.
- 16.21 There is no spare capacity on the Finucane Island section of the Goldsworthy Railway Line, and there will not be any spare capacity for the foreseeable future. It is not clear whether double tracking of the Finucane Island section is feasible and the extent to which such double tracking would increase capacity on that section of the Goldsworthy Railway Line.

- 16.22 BHPBIO has no plans to double track the Finucane Island section of the Goldsworthy Railway Line and there are significant impediments to double tracking of the Finucane Island section.
- 16.23 Development of a Goldsworthy Junction to Anderson Point section, as an alternative facility, is physically feasible and no more expensive in terms of capital costs than double tracking the Finucane Island section (if it were possible).
- 16.24 Access to the Mt Newman Railway Line may not be granted and it appears very unlikely that the Mindy Mindy prospect will be economic. However, even if access were to be granted to the Mt Newman Railway Line and the Mindy Mindy prospect were to be economic, any projects or prospects which are located in the vicinity of Mindy Mindy would be able to use the last section of the Chichester Railway Line to transport ore to the Applicant's port facilities at Anderson Point.

**Facility will not meet foreseeable demand**

- 16.25 Even though the Goldsworthy Railway Line operates in two distinct sections, it is very unlikely that a third party mining company would seek access to the Yarrie section without access to the Finucane Island section. This is because it would be impractical and uneconomic for a third party to exit the Goldsworthy Railway Line from the Yarrie section given the added cost of unloading the ore at the end of the Yarrie section and then reloading the ore for transportation by road to port facilities.
- 16.26 In light of this, the capacity of, and the reasonably foreseeable demand for, the Goldsworthy Railway Line should be assessed, for the purposes of criterion (b), with respect to the entire railway line.
- 16.27 As stated above, there is no spare capacity on the Finucane Island section of the Goldsworthy Railway Line, and there will not be any spare capacity for the foreseeable future. It is not clear whether double tracking of the Finucane Island section is feasible and the extent to which such double tracking would increase capacity on that section of the Goldsworthy Railway Line. Further, BHPBIO has no plans to double track the Finucane Island section of the Goldsworthy Railway Line and there are significant impediments to such double tracking.
- 16.28 Further, double tracking of the Finucane Island section of the Goldsworthy Railway Line would amount to a very costly duplication of the current facility, rather than a limited augmentation of the facility.
- 16.29 Accordingly, the capacity of the Goldsworthy Railway Line is insufficient to meet the reasonably foreseeable demand for the use of the Goldsworthy Service.

**Costs of third party access**

- 16.30 As stated above, the costs of constructing the Goldsworthy Junction to Anderson Point section as an alternative facility are comparable to the capital costs of double tracking the Finucane Island section.
- 16.31 However, if the 'social test' approach were to be adopted for the interpretation of criterion (b), the other costs of each alternative must be weighed against each other.
- 16.32 In these circumstances, the other costs of providing access to the Goldsworthy Railway Line are likely to be so substantial as to overwhelmingly favour development of the alternative facility over double tracking of the Finucane Island section of the Goldsworthy Railway Line and third party use of that double tracked section.

16.33 The other costs and disadvantages of third party use of a double tracked Finucane Island section are explained in detail above.

**17. CONTRARY TO THE PUBLIC INTEREST – CRITERION (f)**

17.1 The Council cannot declare the Goldsworthy Service unless it is satisfied that access would not be contrary to the public interest.

**Principles to be applied**

17.2 Even if criteria (a) to (e) under s44G(2) of the TPA are satisfied, there is no presumption that access would not be contrary to the public interest. Criterion (f) is an independent criterion in s44G(2) in respect of which the Council must be satisfied.

17.3 Criterion (f) requires "the consideration of the overall costs and benefits likely to result from declaration and the consideration of other public interest issues which do not fall within criteria (a) - (e)".<sup>141</sup>

17.4 The Council must undertake a cost/benefit analysis which must include an assessment of the probability of the costs and benefits of access. That is, in determining whether the magnitude of the benefits that arise from access (producer and consumer surplus) would outweigh the costs incurred, the Council must take into account the likelihood of these benefits actually occurring.

17.5 A key public interest consideration is the net impact of declaration on economic efficiency. Economic efficiency is generally equated to the maximisation of the sum of producer surplus and consumer surplus. Further, as stated by the Council, "economic efficiency must be assessed from the perspective of society as a whole".<sup>142</sup>

17.6 Moreover, the Council must have regard to the objects of Part IIIA before making a recommendation and those objects include "the economically efficient operation of, use of and investment in the infrastructure by which services are provided": s44AA.

17.7 In order to be taken into account in the analysis undertaken by the Council, the costs and benefits must be costs and benefits that accrue only where access occurs.

**Benefits potentially arising from access**

17.8 The potential benefits that might accrue from third party access to the Goldsworthy Railway Line are small and in any event unlikely to be realised.

17.9 To the extent that such benefits might be realised, their quantifiable impact on the Australian public is likely to be trivial and will almost certainly be outweighed by the potential costs and diseconomies of third party access.

17.10 Any benefits accruing from third party access to the Goldsworthy Railway Line will be trivial because:

- (a) the amounts of ore that might be produced from third parties using the Goldsworthy Railway Line would total **less than 1%** of the global iron ore market;
- (b) the Mindy Mindy prospect is not economically viable and in any case does not require access to the Goldsworthy Railway Line to be developed and exploited;

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<sup>141</sup> *Re Sydney Services Pty Ltd* (2005) 227 ALR 140 at para 192.

<sup>142</sup> NCC Guide to Part IIIA, Part B, at 111.

- (c) of the five projects and prospects identified by the Applicant as requiring rail access, three are entirely speculative, one (for manganese) has been operating for 10 years using road haulage and one proposes to use road haulage – that is, none require access to the Goldsworthy Railway Line to be developed and exploited;
- (d) there is no evidence that any third party project requires access to the Goldsworthy Railway Line to be developed and exploited; and
- (e) transportation of ore by road to port facilities at Port Hedland is economically viable for third party projects in the vicinity of the Goldsworthy Railway Line.

**Costs arising from access**

- 17.11 The substantial costs and diseconomies that would result from third party access to the Goldsworthy Railway Line have been explained above.
- 17.12 Most significantly, as detailed in the Report entitled "Regulation for the Future of Australia's Natural Resources Sector", which is **Annexure 1**, third party access would:
  - (a) have an adverse impact on Australia's global competitiveness in resources during a time of high demand;
  - (b) introduce economic inefficiencies in the operation and use of, and investment in, export infrastructure; and
  - (c) reduce social surplus for Australia.

**Access would be contrary to the public interest and the objects of Part IIIA**

- 17.13 For the reasons set out above, declaration of the Goldsworthy Service would be contrary to the public interest and the objects of Part IIIA.