COMMONWEALTH OF AUSTRALIA

Trade Practices Act 1974

IN THE AUSTRALIAN COMPETITION TRIBUNAL

File No 5 of 2006

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**

Applicant

AFFIDAVIT OF DEREK MILLER

SWORN ON 20 DECEMBER 2007

Filed on behalf of BHP Billiton Iron Ore Pty Ltd and
BHP Billiton Minerals Pty Ltd by:
Blake Dawson
Level 39, 101 Collins Street
Melbourne VIC 3000

Tel: (03) 9679 3000
DX: 187 Melbourne
Fax: (03) 9679 3111
Email: stephen.ridgeway@blakedawson.com
Ref: SZR.CZE 03 1399 3009

CONTENTS

Document number	Details	Paragraph
1	Affidavit of Derek Miller sworn on 19 December 2007.	
2	Annexure "DM-1", being a copy of Derek Miller's curriculum vitae	9
3.	Annexure "DM-2", being a copy of a cable from Sir Earle Page dated 13 April 1938	14
4.	Annexure "DM-3", being a map identifying major iron ore projects in the Pilbara	17
5.	Annexure "DM-4", being a copy of an extract of the Goldsworthy Feasibility Study	22
6.	Annexure "DM-5", being a copy of the Goldsworthy Agreement Act	30
7.	Annexure "DM-6", being a copy of the Hamersley Agreement Act	46
8.	Annexure "DM-7", being a copy of the Newman Agreement Act	54
9.	Annexure "DM-8", being a copy of the Robe River Agreement Act	73
10.	Annexure "DM-9", being a copy of ConsMin's Quarterly Activities Report for the Quarter Ended 31 March 2006	90
11.	Annexure "DM-10", being copies of ConMin's Quarterly Activities Reports from 2003 to March 2006	114
12.	Annexure "DM-11", being a copy of a presentation given by FMG at the Diggers and Dealers Conference at Kalgoorlie, Western Australia, on 8 August 2007	118
13.	Annexure "DM-12", being a copy of a Proved Reserve Classification Statement from FMG to the ASX dated 31 May 2006	125
14.	Annexure "DM -13", being a copy of the CRU Iron Ore Market Service – Interim Report Summary for December 2007	138
15.	Annexure "DM-14", being a copy of a presentation given by FMG at the CLSA Conference at Shanghai, China, on 15 May 2007	158

On 20 December 2007, I, **DEREK MILLER**, Consultant Mining Engineer of 68 Teal Park Place, Gingin, in the State of Western Australia say on oath that:

1. I have 34 years of management experience in the iron ore industry, and since 2004 I have continued to undertake work as a consultant for a range of clients in the mining industry.

2. I have the following tertiary and industry qualifications:

   (a) Bachelor of Engineering (Mining) 1962 – University of Queensland;

   (b) Bachelor of Engineering (Metallurgy) 1963 – University of Queensland;

   (c) Bachelor of Economics 1968 – University of Queensland; and

   (d) Western Australian Quarry Manager Certification.

3. I am a Fellow of the Australian Institute of Mining and Metallurgy and a Chartered Professional Engineer (Mining).

4. I have had the following management experience in the iron ore industry:

   (a) from 1970 to 1974 I was the Mine Manager of Savage River Mines (north west Tasmania). In this role I had responsibility for managing the mine, concentrator and pipeline operations of Savage River;

   (b) from 1974 to 1990 I was the Deputy General Manager and General Operations Manager for Goldsworthy Mining Limited, which was the manager of the Goldsworthy mining project (described below in paragraphs 24 to 43) in this period. In this role I was responsible for the management of the mining, rail and port operations of Goldsworthy, as well as the management of the company towns at Goldsworthy, Shay Gap and Finucane. As discussed below at paragraph 42, BHP Limited (**BHP**) took a controlling interest in the Goldsworthy project in 1990;

   (c) from 1990 to 1997 I was the General Manager of Rail and Port Operations for BHP Iron Ore Pty Ltd (**BHPIO**). After BHP had taken a controlling interest in the Goldsworthy project in 1990, it was the manager of:

      (i) the mining operations carried out in the Newman and Goldsworthy mining areas (and the Yandi mining area from 1992);

      (ii) the Newman and Goldsworthy rail lines; and

      (iii) the Nelson Point and Finucane Island port facilities at Port Hedland;

(d) from 1998 to 2001 I was the General Manager of Mining and Technical Services. During that time, BHPIO was the manager of the mining operations set out above; and

(e) from 2001 to 2004 I was the Vice President of Operations for BHP Billiton Iron Pty Ltd (**BHPBIO**) (as it was following BHP's merger with Billiton Plc), reporting to the President of BHPBIO. In this role I was responsible for the day to day management of BHPBIO's mine, rail and port operations. At that time, there were approximately 3,000 staff and contractors working at these operations. In this role, I also managed a major project reviewing BHPBIO's long term strategy.

5. In addition to the above management roles, I also participated in a number of iron ore industry bodies. For example, I was a delegate of the Western Australian Iron Ore Industry Consultative Council (**Consultative Council**) that was formed in 1984 to provide a forum for Government, management and union representatives to meet and facilitate the development of the industry. Goldsworthy Mining Limited was a member of the Consultative Council, and I represented Goldsworthy Mining Limited on the Consultative Council as a delegate.

6. Amongst other responsibilities, in the above management roles I gained substantial experience in assessing and implementing a number of expansion programs. For example, I was involved:

(a) from 1985 to 1990, in a program that expanded the mining operations of the Goldsworthy project, and established a beneficiation facility for this project;

(b) from 1992 to 1995, in the establishment of a new stockyard at the Nelson Point port facilities;

(c) from 1996 to 1998, in a capacity expansion project of the iron ore operations managed by BHPIO which involved the installation of a new car dumper, an upgrade of the crushing and screening facilities at Nelson Point and the expansion of rail facilities. This expansion of rail facilities involved the construction of the Jimblebar junction (at the point of intersection between the Newman railway line and a spur line to the Jimblebar mine), and the development of some additional sidings on the Newman railway line; and

(d) from 2000 to 2004, in the development of operations at Mining Area C (which I describe below at paragraph 43).

7. Since retiring from full time employment with BHPBIO in 2004, I have been retained on contract by BHP Billiton Limited (**BHPB**) and have continued to undertake work as a consultant for a range of clients in the mining industry including:

(a) BHPBIO;

(b) BHPB operations, including manganese, coal and aluminium operations;

(c) Kumba Resources, a South African resources company that produces iron ore; and

(d) Minara Resources, a Western Australian based resources company that produces nickel.

8. Specific tasks that I have undertaken as a consultant have included:

(a) advising BHPBIO on the expansion projects that it is undertaking;

(b) assisting Minara Resources in assessing proposals for extending the contracts for the long distance trucking of ore from its Murrin Murrin nickel operations; and

(c) assisting BHPB's alumina operations at Boddington in undertaking comparative studies considering the transport of ore by truck, train or conveyors.

9. Annexed and marked "**DM-1**" is a copy of my curriculum vitae.

10. My affidavit is divided into three parts:

A. History of the development of the Pilbara iron ore industry

The first part of my affidavit describes the development of the Pilbara iron ore industry;

B.

C. Car dumping

The final part of my affidavit considers the operation and capacity of car dumpers, and how the proposed production and sale of additional tonnage from Mindy Mindy may impact of Fortescue Metal Group Limited's (**FMG**) car dumping operations.

A. HISTORY OF THE DEVELOPMENT OF THE PILBARA IRON ORE INDUSTRY

11. I set out below a description of the initial development of the iron ore industry in the Pilbara. The information contained in this description is principally based on:

(a) my own experience in the iron ore industry, as set out above; and

(b) where the matters discussed are not within my direct experience, they are based the knowledge I have obtained during my long involvement in the iron ore industry detailed above. For example, from information contained in documents relating to the establishment of iron ore projects in the Pilbara (some of which are annexed to this affidavit), and from discussions with other people involved in the establishment and development of the iron ore industry in the Pilbara.

Background to the development of the Pilbara

12. Prior to the establishment of the Pilbara iron ore industry in the 1960s, there had been some iron ore developments in Australia, but these had been, by comparison, on a small scale. Such developments included:

(a) iron ore operations in South Australia;

(b) iron ore operations on Cockatoo Island and Koolan Island, which are both located off the north west coast of Western Australia; and

(c) an integrated mining and processing operation run by BHP which involved iron ore operations in Koolyanobbing (near Kalgoorlie, east of Perth) and a blast furnace, pig iron mill and steel rolling mill in Kwinana (south of Perth).

13. In 1938 the Commonwealth Government imposed an embargo on iron ore exports. This imposed a significant constraint on the potential scale of iron ore developments in Australia.

14. Annexed and marked "**DM -2**" is a copy of a cable from Sir Earle Page, Minister for Commerce, to Joseph Lyons, Prime Minister on 13 April 1938 discussing the Commonwealth Government's decision to impose an embargo on iron ore exports. As stated in the cable, the key rationale for the iron ore embargo was a concern that Australia did not have sufficient iron ore reserves to support its own industrial development.

15. However, during the 1950s there was a growing awareness that the Pilbara region in the north west of Western Australia contained potentially large mineralisation of iron ore, and the embargo on iron ore exports was removed in 1960.

16. The removal of the embargo on iron ore exports, and the potential demand generated by the rapid industrial growth of Japan in the 1950s and 1960s, were the catalysts for the development of the Pilbara iron ore industry in the 1960s and early 1970s. By 1972 there were four major iron ore producers in the Pilbara:

(a) the Goldsworthy joint venture (first shipment in May 1966);

(b) Hamersley Iron Pty Ltd (first shipment in August 1966);

(c) the Mount Newman joint venture (first shipment in April 1969); and

(d) Robe River Iron Associates joint venture (first shipment in 1972).

17. Annexed and marked "**DM-3**" is a map of the Pilbara region. The location of the original projects that I refer to above, and the location of a number of the expansions to these projects, are identified on this map.

18. In addition to the Pilbara iron ore producers, Western Mining Corporation Limited (**WMC**) also developed Koolanooka mine, east of Geraldton. The first shipment of iron ore product from the Koolanooka mine was exported from Geraldton in 1966, prior to the first shipment of product from the Pilbara.

Challenges in developing iron ore projects in the Pilbara

19. The history of the development of each of the initial Pilbara projects is described in detail below. However, the nature of each of the developments was similar in that, in addition to having to establish mining and processing facilities, each of the producers also had to fund and construct their own dedicated rail and port facilities.

20. In many instances, the producers also had to establish townships to service their employees and contractors.

21. I have seen documents that were prepared by private sector participants that were in involved in the initial development of the various Pilbara iron ore projects, such as the Mount Goldsworthy Mining Associates *Feasibility Report* of October 1963 (**Goldsworthy Feasibility Report**) which was compiled by the participants in the Goldsworthy project (the history of the development of this project is set out below).

22. The Goldsworthy Feasibility Report states:

> *"... it is difficult to see that the Western Australian Government itself can make any concessions at this stage which would have a major effect on feasibility, insofar as the attractiveness of the investment is concerned. Precedents have become established regarding the key rates of royalty and Government are unlikely to favour any adjustment in this respect. It has also to be remembered that the Western Australian Government has no large funds of its own available for subsidising the undertaking in any way. There are perhaps a number of minor points where the agreement could be amended to facilitate eventual operations in the field and to save small amounts in capital and operating costs, but these are not thought to be of really major significance..."*

Annexed and marked "**DM-4**" is a copy of the relevant extract of the Goldsworthy Feasibility Report.

23. Each of the operations faced a number of similar challenges that were, to a certain extent, peculiar to developing iron ore resources in a region such as the Pilbara. These challenges included that:

(a) the Pilbara region:

(i) is a hostile and difficult environment, with extreme and variable climatic conditions;

(ii) is remote, and, at the time, contained only small and scattered communities; and

(iii) at the time, had very limited existing infrastructure;

(b) given that iron ore was (and remains) a relatively low value resource, it had to be mined in large volumes at the respective deposits for the projects to be economic. This issue was exacerbated by the fact that the ore had to be hauled long distances from the mine to the port, and then shipped long distances from the port to the final customer (predominantly in Japan at that time);

(c) the necessity to produce iron ore in large volumes meant that the companies had to prove the existence of such volumes, and also accept significant commercial risk given:

(i) the huge capital investment involved in the establishment of mining operations, processing facilities, and rail and port infrastructure;

(ii) the uncertainty as to whether the long term level of demand for iron ore would be sufficient to support production in the necessary volumes for the Pilbara developments to be economic. The actual experience of the Pilbara iron ore industry bore out this uncertainty as there was rapid growth in the demand for iron ore from the Pilbara from the mid to late 1960s through to the mid 1970s, followed by over a decade of stagnant growth which lasted until late 1980s; and

(iii) that there were a number of alternative iron ore reserves around the world that had the potential to be developed and compete with iron ore from the Pilbara in the seaborne market, again creating uncertainty as to the amount ore that would be demanded from the Pilbara. For example, the Iron Ore Company of Canada had been exporting iron ore products from the Labrador province in eastern Canada since the late 1940s, and there was also the prospect of iron ore reserves in Brazil being developed (which in fact occurred with Brazil now being a major producer of iron ore);

(d) the iron ore deposits were often very large distances from the relevant port facilities. Given the lack of any existing public infrastructure, the companies involved in the projects had to develop their own transport infrastructure capable of conveying large volumes of ore these long distances from the mines to the port;

(e) there were no existing port facilities that were capable of servicing the large volumes of ore that that had to be shipped from the Pilbara, or the vessels that transported these large volumes of ore. Again, the companies themselves had to undertake the development of port facilities that could service the shipping of large volumes of iron ore; and

(f) in many instances, the companies had to take responsibility for developing townships capable of servicing their workforces as such settlements did not previously exist in the Pilbara.

Development of Pilbara iron ore operations

Goldsworthy project

24. The first of the Pilbara operations to commence production was the Goldsworthy project.

25. The iron ore reserves that were initially mined for the purposes of the Goldsworthy project were located at Mt Goldsworthy, approximately 100 km east of Port Hedland (marked on Annexure DM-3). The Western Australian Department of Minerals and Energy had identified iron ore reserves at Mt Goldsworthy in the 1950s.

26. In 1961, the Government of Western Australia called for tenders for the mining, transportation and shipment of up to 15,000,000 tons of iron ore from the Goldsworthy deposits.

27. Consolidated Gold Fields (Australia) Pty Limited, Cyprus Mines Corporation (a United States Corporation) and Utah Construction & Mining Co (also a United States corporation) formed a joint venture (as equal partners) and submitted a tender for the Goldsworthy project that was accepted by the Government of Western Australia.

28. In 1962 the joint venturers entered into an agreement with the State of Western Australia, and this was ratified by the *Iron Ore (Mount Goldsworthy) Agreement Act 1962* and *Iron Ore (Mount Goldsworthy) Agreement Act 1963.*

29. Subsequently, in 1964, the joint venturers entered into a further agreement with the State of Western Australia which was ratified by the *Iron Ore (Mount Goldsworthy) Agreement Amendment Act 1964* (**Goldsworthy Agreement Act**) which repealed the earlier Acts of 1962 and 1963.

30. Annexed and marked "**DM-5**" is a copy of the Goldsworthy Agreement Act.

31. As I describe below, State Agreements were also entered into for the other major iron ore projects in the Pilbara. These State Agreements set out the rights and obligations of the State of Western Australia (**State**) and the developer of the relevant projects. During the course of my employment with Goldsworthy Mining Limited and BHPBIO I, on occasion, had to have regard to the application of the terms of the State Agreements that applied to operations managed by these entities.

32. The basic framework of the State Agreements that I have seen and worked with are similar. They involve:

    (a) the State granting the developers the necessary rights to develop the iron ore project, and a degree of certainty as to the legal framework governing the project; and

    (b) the developers then being subject to a series of obligations with respect to the development of the project.

33. Some examples of these obligations are set out below, and they have involved matters such as the development of the relevant mine deposits, rail and port infrastructure and townships.

34. My understanding of the intent of such State Agreements was that the developers of iron ore projects in the Pilbara would fund the developments that they were obliged to undertake themselves in return for the development rights being granted by the State. Further, as reflected in the quote from the Goldsworthy Feasibility Study above at paragraph 22, it also appears that the developers of the Pilbara iron ore projects anticipated that they would have to fully fund the development of these projects themselves, and this was what occurred in practice (as I discuss below).

35. In terms of the obligations under the Goldsworthy Agreement Act, the joint venturers were required, amongst other things, to submit to the State Government proposals for:

    (a) the development of the mining property at Mt Goldsworthy;

    (b) the construction of a railway from Mt Goldsworthy to a port installation; and

    (c) the development of a harbour and wharf site at Port Hedland or some other port.

36. The joint venturers submitted such proposals, following which they undertook:

    (a) the development of mining operations at Mt Goldsworthy;

    (b) the construction of a railway line from Port Hedland to the mining operations;

(c) the establishment of a wharf at Finucane Island (opposite the township of Port Hedland);

(d) dredging to create a channel at Port Hedland; and

(e) the establishment of company towns at Goldsworthy and Finucane.

37. In accordance with the usual practice, the joint venturers fully funded these developments.

38. The first shipment of ore from Mt Goldsworthy at Finucane Island took place in May 1966.

39. The Goldsworthy joint venturers later sought to expand their operations and, consequently, entered into a further agreement with the State of Western Australia which was ratified in the *Iron Ore (Goldsworthy-Nimingarra) Agreement Act 1972.*

40. In 1973, the Goldsworthy joint venturers then developed the Shay Gap/Sunrise Hill operations, further east of Mt Goldsworthy. This required the extension of the rail line carrying ore to Port Hedland. The production levels at these original sites declined, and eventually ceased, following which new deposits (again further east of Mt Goldsworthy) were developed at:

(a) Nimingarra in the late 1980s; and

(b) Yarrie in 1993.

41. The Goldsworthy and Shay Gap towns were closed, in 1992 and 1993 respectively, and the mining operations of the Goldsworthy joint venture have subsequently been staffed on a fly in/fly out basis.

42. There were progressive alterations to the participants in the Goldsworthy joint venture project, and the interests of the participants in the project. In particular:

(a) in 1984, BHP acquired Utah, providing it with a 39% interest in the joint venture; then

(b) in 1990, BHP acquired a 100% interest in the Goldsworthy joint venture, with BHP subsequently selling a 15% interest in Goldsworthy to two Japanese companies, CI Minerals (Itochu) and Mitsui.

43. In 2003, a mining area known as Mining Area C, over which the Goldsworthy joint venture participants hold the lease, was established.

Hamersley Iron

44. Lang Hancock had begun exploring the Pilbara in the 1950s, and he and his partner, Peter Wright, acquired a number of tenements following the lifting of the export embargo on iron ore.

45. CRA Limited (now Rio Tinto Limited), with the assistance of Kaiser Steel, an American company, then undertook more detailed exploration of a number of these tenements. In 1962, a major deposit of iron ore was identified at Mt Tom Price, in the Hamersley Ranges.

46. An agreement was reached with the State of Western Australia regarding the development and exploitation of these deposits. This agreement was ratified in the *Iron Ore (Hamersley Range) Act 1963* (**Hamersley Agreement Act**), a copy of which is annexed and marked "**DM-6**".

47. The development of the Hamersley project involved:

    (a) the commissioning of mining infrastructure at Mt Tom Price;

    (b) the establishment of a shipping port at Dampier;

    (c) the construction of a railway between Mt Tom Price and Dampier; and

    (d) the establishment of two towns to service the mining and port operations.

48. In 1966, Hamersley Iron Pty Limited (**Hamersley**) was established as a joint venture between CRA (60%) and Kaiser Steel (40%), an American company. Subsequently, CRA took a 100% interest in Hamersley.

49. The first shipment of Hamersley ore from Dampier was in August 1966.

50. Subsequently, Hamersley's operations have been progressively expanded, and, in addition to the Mt Tom Price mine, it also mines ore at:

    (a) Paraburdoo/Channar;

    (b) Brockman;

    (c) Marandoo;

    (d) Yandicoogina; and

    (e) Eastern Range.

Newman project

51. The discovery of iron ore deposits at Mt Whaleback, which was the initial source of iron ore for the Newman project, was made by Stan Hilditch in 1957.

52. In 1962, following the lifting of the embargo on iron ore exports, Stan Hilditch and his business partner, Charles Warman, lodged an application for the leases on the deposits they had discovered.

53. In 1963, American Metal Climax, Inc (later known as AMAX), an American resources company, was granted an option over these deposits by Hilditch and Warman. AMAX was able to resource more detailed exploration of the Mt Whaleback deposit, and an exploration crew commenced work in 1963.

54. In 1964 an agreement was reached with the State of Western Australia relating to the Newman project. The agreement was ratified in the *Iron Ore (Mount Newman) Agreement Act 1964* (**Mount Newman Agreement Act**). This agreement has been amended on several occasions since 1964. A copy of the Mount Newman Agreement Act is annexed and marked "**DM-7**".

55. From time to time, during the course of my employment with BHPBIO, I had to consider the application of the terms of State Agreements to those operations managed by BHPBIO.

56. The exploration work undertaken at Mt Whaleback from 1963 revealed a large deposit of high grade iron ore. However, construction of the Newman project did not commence until 1967, and the first shipment of Newman product was not made until April 1969.

57. A key factor in the comparatively longer timeframe for the development of the Newman project was the distance of the deposit at Mt Whaleback to Port Hedland. At over 400 kms it was much longer than the distance from either Mt Goldsworthy to Port Hedland (approximately 100 km) or Mt Tom Price to Dampier (approximately 250 km). This significantly increased the capital costs and, consequently, the commercial risks associated with the development of the Newman project.

58. Following the initial exploration work, AMAX sought partners to assist in the development of the Newman project, and:

    (a) in 1964, AMAX formed a consortium with Colonial Sugar Refineries Limited (**CSR**); and

    (b) in 1966, BHP joined the consortium, also agreeing to purchase some iron ore produced by the joint venture for its steel operations.

59. In 1965, purchase agreements were signed between the consortium and a number of Japanese steel mills.

60. On 1 February 1967, there was further alteration in the interests of the companies involved in the development of the Newman project with the execution of a joint venture agreement, known as the Mt Newman Joint Venture Agreement. The joint venture participants, and their respective interests, were as follows:

(a) BHP (through its subsidiary Dampier Mining Company Limited) – 30%;

(b) Pilbara Iron Limited (a holding company for the interests of CSR and AMP, to whom CSR had sold part of its interest) – 30%;

(c) AMAX – 35%; and

(d) Seltrust Iron Ore Limited (a British company) – 5%.

61. Shortly thereafter, AMAX sold 10% of its interest to Mitsui-C. Itoh Iron Pty Ltd, a Japanese company.

62. On 1 February 1967, the participants in the Mount Newman joint venture also appointed BHP as the manager of the project.

63. The development of the Mt Whaleback orebody and the construction of the railway and port facilities at Nelson Point (the opposite side of the harbour at Port Hedland to Finucane Island) all commenced in 1967.

64. In addition, significant work had to be undertaken, including:

(a) further dredging at Port Hedland harbour to allow it to handle larger iron ore ships;

(b) the establishment of the mine site at Mt Whaleback;

(c) the establishment of the processing facilities at the mine and port;

(d) the establishment of the township of Newman, servicing the mining operations at Mt Whaleback;

(e) the expansion and improvement of the Port Hedland township; and

(f) the development of the South Hedland township.

65. The railway from Mt Whaleback to Nelson Point was completed in January 1969, and mining and railing of ore commenced in January 1969.

66. I understand from publications describing the development of the Newman project, such as *The First 500 Million: The Mt Newman Story*, by John McIlwraith, that the cost to the

Newman joint venturers of the initial development of the Newman project was estimated to be approximately $200 million, which was a very substantial sum of money in the late 1960s. The Newman joint venturers fully funded this development.

67. In April 1969, the first shipment of iron ore produced from ore mined at Mt Whaleback was loaded.

68. In January 1986, BHP increased its interest in the Mount Newman joint venture from 30% to 85% through the acquisition of the interests of AMAX and Pilbara Iron.

69. In addition to Mt Whaleback, ore is now also mined from the following deposits in the Newman mining area, all under the management of BHPBIO:

- Orebodies 29 and 30;
- Orebodies 23 and 25;
- Orebody 18; and
- Jimblebar.

70. BHPBIO also manages the operations at:

(a) the Yandi mining area; and

(b) the Goldsworthy and Area C mining areas (described above).

71. BHP Billiton has an 85% interest in the Yandi joint venture, which has the lease on the Yandi mining area deposits. Operations commenced at the Yandi mining area in 1992.

Robe River

72. Cleveland Cliffs Iron Company (an American iron ore producer) commenced exploration of potential iron ore deposits in the Robe River valley in 1962.

73. An agreement that was reached with the State of Western Australia as to the exploitation of ore deposits in the Robe River valley was ratified by the *Iron Ore (Robe River) Agreement Act 1964* (**Robe River Agreement Act**). Annexed and marked "**DM-8**" is a copy of the Robe River Agreement Act.

74. The iron ore reserves discovered at Robe River were of a lower grade than the ore discovered at the Goldsworthy, Newman and Hamersley projects.

75. Consequently, it took several years before iron ore products were able to be produced from the Robe River project as it was necessary to undertake significant exploration and testing

to ensure that the ore from the Robe River reserves could be used to produce products that would be attractive to customers.

76. However, a long term supply contract with Japanese steel makers provided sufficient commercial certainty for construction to commence in 1970 on:

(a) the mine site;

(b) the establishment of port facilities at Cape Lambert;

(c) a railway connecting the mine site and Cape Lambert; and

(d) towns servicing the mine site (Pannawonica) and the port at Cape Lambert (Wickam).

77. In 1972, the first shipment of ore left Cape Lambert.

78. Robe River Iron Ore Associates, which controls the Robe River project, is an unincorporated joint venture. Initially, Cleveland Cliffs had the majority interest in Robe River Iron Ore Associates. Subsequently, the identity of the company holding the majority interest in Robe River Iron Ore Associates has changed a number of times. The majority interest in Robe River is currently held by Rio Tinto.

79. In 1998, Robe River expanded its operations by commencing the development of the West Angelas deposit. This deposit became operational in 2002.

Mindy Mindy deposit

81. I explain that, based on the publicly available information that I have seen about the resource definition work that has already been undertaken at PIO's Mindy Mindy deposit:

(a) it is unclear whether there is sufficient mineralisation at Mindy Mindy

to make the development of Mindy Mindy worthwhile; and

(b) the cost of the further resource definition at Mindy Mindy would, in my view, be significantly less than the $10 million

Advantages of exploiting Chichester Range deposits ahead of Mindy Mindy

82. I discuss at paragraphs 116 to 147 that in my view it would be far more logical and commercially advantageous for FMG to simply increase production at its proposed Chichester Range Project, rather than seeking to produce ore from Mindy Mindy which would require it to develop a relatively small stand alone project. Further, such an approach would also avoid the social costs associated with the works and infrastructure that would be required for the development of Mindy Mindy.

Mindy Mindy deposit

PIO and the Mindy Mindy project

83.

(a) PIO is an incorporated joint venture in which each of FMG and Consolidated Minerals Limited (**ConsMin**) have a 50% interest ;

(b) PIO holds mining tenements at Mindy Mindy and proposes to mine and export iron ore from these tenements ;

(c) FMG has assumed the status of operator and manager of the Mindy Mindy project during the next feasibility stage of the Mindy Mindy project ; and

(d) the proposed Mindy Mindy mine is located:

(i) approximately 50 kilometres east of the Area C mining area;

(ii) approximately 15 kilometres south of Marillana Station;

(iii) immediately east of Weeli Wooli Creek;

(iv) approximately 60 kilometres north west of Newman;

(v) approximately 17 kilometres from the Newman rail line; and

(vi) approximately 295 kilometres south east of Port Hedland

No explanation as to anticipated grade

86. The anticipated grade and impurity levels of iron ore products that may be produced from Mindy Mindy are, as I describe in detail in paragraphs 94 to 106, vital in:

(a) predicting the revenues per tonne that may be generated by Mindy Mindy products in the event that they are produced; and

(b) assessing the production levels that could be supported from the Mindy Mindy deposit, as these will decline significantly at higher grades.

87. ConsMins' press release to the ASX dated 12 May 2006 (the **ConsMin press release**), states:

> *"An initial iron ore resource of 44.8 million tonnes grading 55.2% Fe has been defined at Mindy Mindy, covering approximately one-third or 4.8 km of the total 16 km strike length of the channel iron deposit. This includes a higher grade component, at a 56% Fe cut-off, of 15.5 million tonnes grading 57.1%, which will form the initial focus of the Feasibility Study"*

88. Therefore, it appears from this statement in the ConsMin press release that the options for the future development of Mindy Mindy that will be considered in the feasibility study will focus on the higher grade component of the Mindy Mindy resource.

Resource definition work carried out at Mindy Mindy

90. ConsMin has carried out a resource definition program at Mindy Mindy. The results of this resource definition program are:

(a) summarised in the statement in the ConsMin press release quoted above at paragraph 87; and

(b) described in more detail in ConsMins' Quarterly Activities Report for the Quarter Ended 31 March 2006 (**March 2006 Report**), which is annexed and marked "**DM-9**".

91. The March 2006 Report contains two resource figures (which are also set out in the ConsMin press release) that relate to two different "cut-off grades".

92. The cut off grade is a figure used as a basis for distinguishing waste (material that will not be used in a product) from ore. For example, with the two cut off grades used in the resource estimate for Mindy Mindy:

(a) the 52% Fe cut off grade means that any material with an Fe content of 52% and greater would be designated as ore, and material with an Fe content of less than 52% would be designated as waste; and

(b) the 56% Fe cut off grade means that any material with an Fe content of 56% or greater would be designated as ore, and material with an Fe content of less than 56% would be designated as waste.

93. The tonnage of ore that can be extracted from a deposit at a particular average grade is affected by the cut off grade that is adopted. With the resource estimate for the Mindy Mindy deposit:

(a) the measured and indicated resource estimate is approximately 15.5 million tonnes at an average grade of 57.1% Fe where the 56% Fe cut off grade is used; whereas

(b) the measured and indicated resource is approximately 45 million tonnes at an average grade of 55.2% Fe where the 52% Fe cut off grade is used.

Prospective size and grade of Mindy Mindy resource

94. ConsMin states in its March 2006 Report that the area of drilling it undertook in its resource definition program represented about one third of the strike length of the deposit.

95. Therefore, if the mineralisation of the remainder of the deposit is similar to that of the area drilled, the Mindy Mindy deposit would have a resource of approximately 44.8 million tonnes at an average grade of 57.1% Fe adopting a 56% Fe cut off grade.

96. However, given that it is likely that the area drilled in ConsMins' resource definition program is the most prospective area of the deposit, it is likely that the volume of the whole resource is less than 45 million tonnes (adopting the 56% Fe cut off grade).

99. If the lower cut off grade of 52% Fe is adopted, then it appears possible, based on the resource definition work carried out by ConsMin, that the Mindy Mindy deposit would have a mineral resource of 70 million tonnes.

100. However, if this cut off grade was adopted, it would, at best, significantly reduce the revenue per tonne that would be received for products produced from Mindy Mindy as a lower grade product would have to be produced. In fact, as I discuss below, it is in my view doubtful that ore from Mindy Mindy would be saleable, even in the current market, if the 52% Fe cut off grade were adopted based on the resource definition work that has been carried out at Mindy Mindy.

101. Even if the 56% Fe cut off grade was adopted, ConsMin's resource estimate indicates a relatively low grade ore (i.e., low levels of Fe and high levels of impurities as compared to the iron ore products which are currently produced by BHPBIO and Rio Tinto, and, as I discuss below, are proposed to be produced by FMG from its Chichester Range Project).

102. If the 52% cut off grade were to be adopted at Mindy Mindy, ConsMin's resource estimates indicate that the grade of any prospective product would be significantly lower again. For example:

(a) the average Fe content of the ore with the 52% Fe cut off would be significantly lower than with the 56% Fe cut off grade (55.2% Fe as compared to 57.1% Fe). Given that the revenue per tonne that is received for an iron ore product is

dependent on its Fe content, this lower Fe content would reduce the revenue per tonne that would be received for product from Mindy Mindy; and

(b) the levels of impurities would also be significantly higher with the 52% cut off grade than the 56% cut off grade (i.e., 7.2% silica as against 5.6%, and 3.3.% alumina as against 2.5%). These higher levels of impurities would increase the discount that would need to be applied to product from Mindy Mindy.

103. A particular issue with ore at the 52% Fe cut off grade is the level of alumina. High levels of alumina adversely impact on the efficiency of steelmakers' blast furnaces. If a product produced from Mindy Mindy were to have an alumina content of 3.3% (as with the 52% Fe cut off) then it would be far higher than the levels of alumina in any other iron ore product currently produced in the Pilbara of which I am aware. In fact, in my view, it is doubtful that a product with such alumina levels would be saleable, even in the present market.

[Start Confidential C]

[End Confidential C]

105. Given all of the above:

(a) if the 56% Fe cut off grade is adopted at Mindy Mindy, then on the basis of the resource definition work that has been undertaken:

(i) Mindy Mindy would, at best, have a mineral resource of 45 million tonnes which could not support production of 5 mtpa over 12 years; and

(ii) in all likelihood, the volume of the mineral resource at Mindy Mindy would be less than 45 million tonnes (as it is likely that the initial resource

definition work would have been carried out on the most prospective section of Mindy Mindy); and

(b) if the 52% cut off grade is adopted, it is doubtful that any product that may be produced from Mindy Mindy would be saleable.

106. Therefore, it appears to me, based on the resource work that has been undertaken at Mindy Mindy, that it is not reasonable to assume that the Mindy Mindy deposit would be capable of supporting the production of 5 mtpa of saleable ore over a 12 year mine life.

Cost of additional resource definition work

109. In my view, additional resource definition work could be undertaken at Mindy Mindy at a significantly lower cost than $10 million.

110. As I discuss above, ConsMin has already undertaken a resource definition program at Mindy Mindy, which is described as "comprehensive" in ConsMin's March 2006 Report.

111. While some further resource definition would need to be carried out on the remainder of the deposit that was not drilled during ConsMin's resource definition program, the cost of such work could, in my view, be undertaken at a significantly lower cost than $10 million.

112. Based on BHPB's recent experience, a "rule of thumb" for resource definition work is that it costs $120 for each metre, which covers drilling, assaying, geological logging and all other matters necessary for resource definition. This means that $10 million would allow for resource definition work to be carried out on approximately 83,000 metres. I would normally assume that each metre of drilling would prove up 2,000 tonnes of reserves. Therefore, on this basis, $10 million worth of drilling would prove up 166 million tonnes of ore,

113. My opinion that any additional resource definition at Mindy Mindy would cost significantly less than $10 million is also supported by the cost of the resource definition program that has already been undertaken by ConsMin.

114. Annexed and marked "**DM-10**" are all of the Quarterly Activities Reports for ConsMin from 2003 (when resource definition work at Mindy Mindy appears to have begun) through to

David Henry

March 2006, which state the expenditure on the resource definition program at Mindy Mindy for each quarter.

115. From these Quarterly Activities Reports, it appears that the total amount expended on the resource definition that I describe above, which covered one third of the strike length of the Mindy Mindy deposit, was approximately $2.8 million. Therefore, given that this program covered a third of the strike length of the deposit, it would appear that further resource definition work on the remainder of Mindy Mindy could be undertaken for significantly less than $10 million.

Increasing production at Chichester Range Project instead of developing Mindy Mindy

Chichester Range Project

116. in addition to Mindy Mindy, FMG is also actively involved in a much larger project called the Chichester Range Project, which is being developed and is proposed to comprise:

(a) a mine-site, initially at Cloud Break;

(b) a heavy haul railway running approximately 260 kilometres from Cloud Break to Port Hedland (**TPI Railway**); and

(c) port facilities at Anderson Point within the port of Port Hedland.

117. With respect to the entities involved in the Chichester Range Project,

(a) FMG Chichester Pty Ltd (**FMG Chichester**), a wholly owned subsidiary of FMG, is responsible for the mining components of the Chichester Range Project

(b) TPI, a wholly owned subsidiary of FMG, is responsible for the rail and port components of the Chichester Range Project

Comparison of Chichester Range Project and Mindy Mindy Project

118. Annexed and marked "**DM-11**" is a copy of a presentation that was delivered by Mr Andrew Forrest, CEO of FMG, at the Diggers and Dealers Conference in Kalgoorlie on 8 August 2007 (**Diggers and Dealers Presentation**). This presentation contains statements that, amongst other things, relate to FMG's intended production levels from its Chichester Range deposits.

119. My understanding of FMG's plans with respect to its intended production levels from the Chichester Range Project, based on the statements contained in the Diggers and Dealers Presentation, are that:

David Fleming

(a) FMG initially intends to produce ore at a rate of 55 mtpa, with the first ore to be shipped in May 2008;

(b) FMG is intending to expand this production to 100 mtpa by 2009/2010; and

(c) ultimately, FMG is intending to produce ore at a rate of 200 mtpa, with 120 mtpa of this production coming from its Chichester Range Project and 80 mtpa from its Central Pilbara resources (which are north west of the Chichester Range Project).

120. As I explain elsewhere in this affidavit, it appears to me, based on the resource definition work that has been undertaken at Mindy Mindy, that it is not reasonable to assume that Mindy Mindy would be capable of supporting production of 56 million tonnes of saleable ore.

121. However, even if the Mindy Mindy deposit were able to support production of 56 million tonnes (with FMG's share of such production being 28 million tonnes, and annual share of production in most years of the 12 year mine life being 2.5 mtpa), such production volumes would be marginal as compared to FMG's own forecast of production from its Chichester Range Project. For example, FMG's share of the forecast annual production from Mindy Mindy would be aprroximately:

(a) approximately 4.5% of its initial forecast of annual production from the Chichester Range Project (55 mtpa); and

(b) 2% of its ultimate forecast of annual production from the Chichester Range Project (120 mtpa).

122. To put it another way, FMG has stated that it ultimately expects that annual production from its Chichester Range Project will be approximately 50 times greater than FMG's share of the forecast of annual production from Mindy Mindy.

123. The Diggers and Dealers Presentation also states that FMG's Chichester Range deposits have:

(a) ore reserves of 1.1 billion tonnes; and

(b) a targeted mineralisation of over 3 billion tonnes.

124. The above resource estimates are of an order of magnitude that are greatly in excess of FMG's resource estimate of 70 million tonnes for Mindy Mindy.

125. Annexed and marked "**DM-12**" is a Proved Reserve Classification Statement from FMG to the ASX dated 31 May 2006, which relates to proved reserves at Cloud Break (the initial mine that FMG is developing in its Chichester Ranges Project). The grade of the proved

David Flemming Derek J Miller

ore reserves at Cloud Break are significantly higher than the grade of the ore drilled in ConsMin's resource definition program at Mindy Mindy. This is shown by the below table:

Resource	Cloud Break	Mindy Mindy (56% Fe cut off grade)	Mindy Mindy (52% Fe cut off grade)
Fe content %	59.3	57.1	55.2
SiO_2% (Silica)	3.82	5.6	7.2
Al_2O_3% (Alumina)	1.97	2.5	3.3
P% (Phosphorus)	0.05	0.073	0.073
LOI%	8.47	9.6	9.9

126. The higher grade and lower alumina of the ore from the Chichester Range deposits would mean that FMG would receive a higher price for ore products produced from the Chichester Range deposits than it would for products produced from Mindy Mindy.

127. In fact, as I discuss above, given the grade and impurity levels of the ore that has been drilled in the resource definition work carried out at Mindy Mindy, it is doubtful that the ore would be saleable if a 52% Fe cut off grade is adopted, even in the present market.

Efficiency of increasing production from Chichester Ranges as a substitute for Mindy Mindy

128. Therefore, given the resource estimates and forecast production levels from the Chichester Range Project, an option for FMG would be to defer the development of Mindy Mindy and make up any projected shortfall in production by marginally increasing production levels from its Chichester Range Project. For example, FMG could make up any shortfall in its forecast share of production from Mindy Mindy by increasing annual production at its Chichester Range Project by 2.5 mtpa for a 12 year period (which, as I describe above, would mean increasing FMG's ultimate forecast production from its Chichester Range Project by approximately 2%).

129. In my view, it would be more commercially sensible for FMG to adopt this approach as:

(a) it would avoid all of the capital expenditure that would be required for Mindy Mindy;

(b) it would be utilising its own capital more intensively and exploiting the economies of scale associated with its Chichester Range Project (i.e., it could use its plant

and equipment at its Chichester Range Project more intensively, rather than having to install additional plant and equipment at Mindy Mindy);

(c) it would only require a marginal increase in FMG's forecast annual production levels from the Chichester Ranges;

(d) it would be exploiting deposits with far larger resource estimates;

(e) the grade of the product being produced from the Chichester Ranges would be significantly higher than the grade of the product that could be produced from Mindy Mindy, resulting in higher revenues per tonne for the products and higher returns;

(f) the alumina (and other impurities) in the ore from Mindy Mindy appears to be significantly higher than the ore from the Chichester ranges, meaning that a greater discount would be applied to any ore produced from Mindy Mindy;

(g) it would avoid any adverse impacts and costs from having to use the Newman railway line, such as dealing with an extremely high level of traffic intensity; and

(h) it would be producing ore from a project in which it has a 100% interest, rather than a 50% interest.

130. A further source of inefficiency with developing a project at Mindy Mindy is that these operations would need function independently of FMG's operations in the Chichester Ranges. In particular, the lack of a direct road link between Mindy Mindy and the Chichester Range Project would necessitate the two projects operating separately of each other.

131. Some examples of the inefficiencies of having a small stand alone project at Mindy Mindy operating independently of the Chichester Range Project are that it would not be feasible to:

(a) service and maintain any equipment (including trucks) used in the Mindy Mindy project at Chichester mining operations;

(b) supply other vital necessities for the Mindy Mindy operations, such as fuel, from the Chichester operations; and

(c) regularly transport staff and contractors by road between Chichester operation and Mindy Mindy. That is, the lack of a direct road link between the Chichester Ranges Project and Mindy Mindy would significantly constrain the potential for staff and contractors housed at the Chichester Range Project to be used at the Mindy Mindy

David Fleming Derek J Meikle

operations. Therefore, there is limited potential to exploit the economies of scale of already having an established camp at the Chichester Range Project.

132. The efficiencies of expanding existing operations in preference to developing small new projects is reflected in the approach that has been taken by major iron ore producers in expanding their production. For example, BHPBIO's recent expansion programs have involved, and do involve, the expansion of its existing mining areas, and port and rail infrastructure. When BHPBIO has developed new assets, such as the Yandi and Area C mining areas (which I describe above at paragraphs 43 and 70 to 71), the resource potential of these assets was very large, meaning that they can support long life projects (unlike Mindy Mindy).

133. Generally, the approach that is taken by iron ore producers in expanding production is to initially develop their best resource, in terms of size and grade, before moving to their next best resource. For example, based on the statements in the Diggers and Dealers Presentation, it appears that FMG is proposing to progressively increase its production to 200 mtpa by:

(a) initially developing its Cloud Break deposit in the Chichester Ranges; and

(b) then expanding production from other deposits in the Chichester Ranges, and from deposits in the Central Pilbara region.

134. FMG expects, based on the statements in the Diggers and Dealers Presentation, that all of these deposits will have ore resources volumes far in excess of those at Mindy Mindy.

136. Therefore, applying this reasoning, given that the cost of marginally increasing production from the Chichester Range Project would clearly be much lower than developing the Mindy Mindy project, it would be socially optimal to pursue the former option.

Pricing and timing benefits from producing from Chichester Range project instead of Mindy Mindy project

137. Another advantage of FMG increasing its production by 2.5 mtpa through a marginal increase in production at the Chichester Range project, rather than seeking to develop a small stand alone project at Mindy Mindy, is that it is likely that iron ore product from the Chichester Range project will be able to be produced and sold much sooner than any iron ore product that may be produced from Mindy Mindy.

David Flemming

138. Annexed and marked "**DM-13**" is the CRU Iron Ore Market Service – Interim Report Summary for December 2007 (**CRU Report Summary**). As discussed in the CRU Report Summary, the price for iron has increased significantly in the last few years and CRU is anticipating further price increases in the next couple of years (including a significant price increase this year). CRU then predicts that price will moderate in the medium term.

139. Therefore, based on these predictions, there appears to be an advantage to iron ore producers in being able to produce and sell iron ore products in the period of predicted price increases in the short term.

140. According to the statements made in the Diggers and Dealers Presentation, the development of the Chichester Range project is well advanced, and the first shipment of ore from this project is due to be exported in May 2008.

141. Therefore, if FMG were to marginally increase its production from its Chichester Range project by 2.5 mtpa in the next few years it would be able to take advantage of the predicted period of increasing prices in the short term.

142. In contrast, even if iron ore products were ultimately produced from Mindy Mindy, it is, in my opinion, unlikely that this could occur for a number of years given that:

(a)

(i) further resource definition work needs to be undertaken at Mindy Mindy; and

(ii) a feasibility study of the Mindy Mindy project needs to be undertaken;

(b) there are no statements to suggest that the necessary environmental and other regulatory approvals required to undertake mining operations at Mindy Mindy have been obtained; and

(c) PIO has yet to determine a feasible means of transporting ore from Mindy Mindy to Port Hedland

(i) there are no statements to indicate that PIO (or FMG) has obtained the necessary approvals to construct the proposed Mindy Mindy haul road

David Fleming

(ii) PIO (or FMG) would need to be able to agree to terms of access to use the Newman railway line; and

(iii) PIO (or FMG) would need to construct a rail line in the vicinity of Port Hedland from the Newman railway line to one of the proposed port facilities. There may be delays in obtaining the necessary approvals to construct such a rail line.

143. Therefore, even if iron ore was ultimately produced from Mindy Mindy, it is, in my view, probable that it would take several years for this to occur. This would mean that it would be unlikely that any such ore would be sold in the predicted period of increasing iron ore prices in the short term.

Social costs

147. These costs could be completely avoided if Mindy Mindy was not developed and, instead, there was a marginal increase in production from the Chichester Ranges Project.

C. CAR DUMPING

148. The final section of my affidavit discusses the operation and capacity of car dumpers, and how the proposed production and sale of additional ore from Mindy Mindy may impact on FMG's car dumping operations.

149. Car dumpers are located at the port facilities of an iron ore operation and, as the name indicates, are used to dump ore arriving in ore cars from the mines. Following dumping, the ore (depending on the nature of the operation) is then conveyed to:

(a) crushing and screening plants for further processing;

David Flemming

(b) stockyards for stockpiling; or

(c) directly to ships for loading.

150. The car dumpers that are used at BHPBIO's port facilities (and, I understand, are proposed to be used at FMG's port facilities) rotate coupled ore cars to an upside down position (two or three at a time) so that the dumped ore falls into a bin, from where it is fed onto conveyor belts.

151. The installation of a car dumper involves significant capital expenditure. For example, I understand that it cost approximately $200 million to install BHPBIO's most recent car dumper.

152. A new car dumper will significantly increase the capacity of a car dumping system, meaning that there is the potential for there to be unused car dumping capacity for a period if the other elements of the production system do not have matching capacities (I discuss the factors affecting car dumping capacity below).

153. Therefore, iron ore operators:

(a) seek to maximise the throughput that they can achieve from their car dumping system, and the value that they derive from its operation; and

(b) will carefully evaluate the need to invest in a new car dumper given their expense and the potential for there to be unused car dumper capacity for a period after the installation of a new car dumper.

154. Determining the capacity of a car dumper is complex as it is dependent on the interaction of the car dumping operations with other elements of the production system, such as the rail operations and other port operations, rather than on an assessment of the theoretical capability of the car dumpers in isolation.

155. By way of illustration, BHPBIO's car dumpers have a maximum dumping capability of approximately 10,500 tonnes per hour (i.e., if a car dumper is operating constantly for an hour then approximately 10,500 tonnes of ore will be conveyed from the dumper). However, the annual capacity of each of BHPBIO's car dumpers cannot be determined by simply multiplying 10,500 tonnes by the number of hours in a year. Rather, any assessment of the annual capacity car dumpers must take account of a variety of other factors, including the limits placed on car dumping capacity by:

(a) train arrivals, as a car dumper cannot be utilised if there is not a loaded train ready to be dumped;

David Fleming

(b) other aspects of the port operations. For example, if stockpiles in the stockyards are full then car dumpers cannot be utilised as there will be nowhere to convey the dumped ore;

(c) the maintenance requirements of a car dumper; and

(d) the time it takes to prepare ore cars for dumping.

156. Given the range of factors that affect the capability of car dumping operations, BHPBIO assesses car dumper capability with the assistance of sophisticated simulation modelling.

157. My understanding is that, based on this simulation modelling, BHPBIO's current view is that the capacity of each its four dumpers is between 40 to 50 mtpa.

158. Annexed and marked "**DM-14**" is a presentation entitled "Iron Ore Supply – A Way Forward for China" that was given by FMG at the CLSA China Forum at Shanghai, China and was lodged with the ASX on 15 May 2007 (**CLSA Presentation**). FMG estimates, on page 12 of the CLSA Presentation, that the capacity of its car dumper at Anderson Point is approximately 50 mtpa.

159. The methodology used to determine the capacity of FMG's car dumper (as set out in the CLSA Presentation) appears to me to be simplified. However, consistent with my discussion above at paragraph 155 about the constraints on car dumping operations, the CLSA Presentation estimates that FMG will only be able to utilise its car dumper approximately 60% of the time.

160. As I describe above, based on the statements contained in the Diggers and Dealers Presentation, it is my understanding that it is FMG's intention to:

(a) produce 55 mtpa from its Chichester Range Project; and

(b) increase production from the Chichester Ranges to approximately 100 mtpa by 2009/2010.

161. Further, it is my understanding from the statements in the Diggers and Dealers Presentation and the CLSA Presentation that FMG is intending to initially have a single car dumper, and to install a second car dumper as production from Chichester increases to FMG's stated target of 100 mtpa from 2009/2010.

162. Therefore, it would appear to me that:

(a) in the initial period of forecast production from Chichester, FMG's single car dumper (which FMG estimated to have a capacity of 50 mtpa in the CLSA presentation) will have difficulty in coping with FMG's forecast production of target of 55 mtpa from May 2008; and

David Fleming

(b) if FMG subsequently installs a second car dumper, its car dumping system will continue to be operating at close to maximum capacity if FMG's increases it production from Chichester to 100 mtpa from 2009/2010, as it has forecast. That is, if both car dumpers have a capacity of 50 mtpa (as estimated in the CLSA Presentation), then FMG's car dumping system would be operating at its maximum capability if FMG were to produce 100 mtpa.

163. Consequently, it appears that, in the periods noted above, FMG's car dumping system may not have the capacity to deal with an additional 5 mtpa of ore from Mindy Mindy (if saleable ore in such volumes ever were to be produced from Mindy Mindy).

164. Further, it would be inefficient for FMG to install an additional car dumper to deal with an additional 5 mtpa of low grade ore from Mindy Mindy given that, as I explain above:

(a) it would involve significant capital expenditure; and

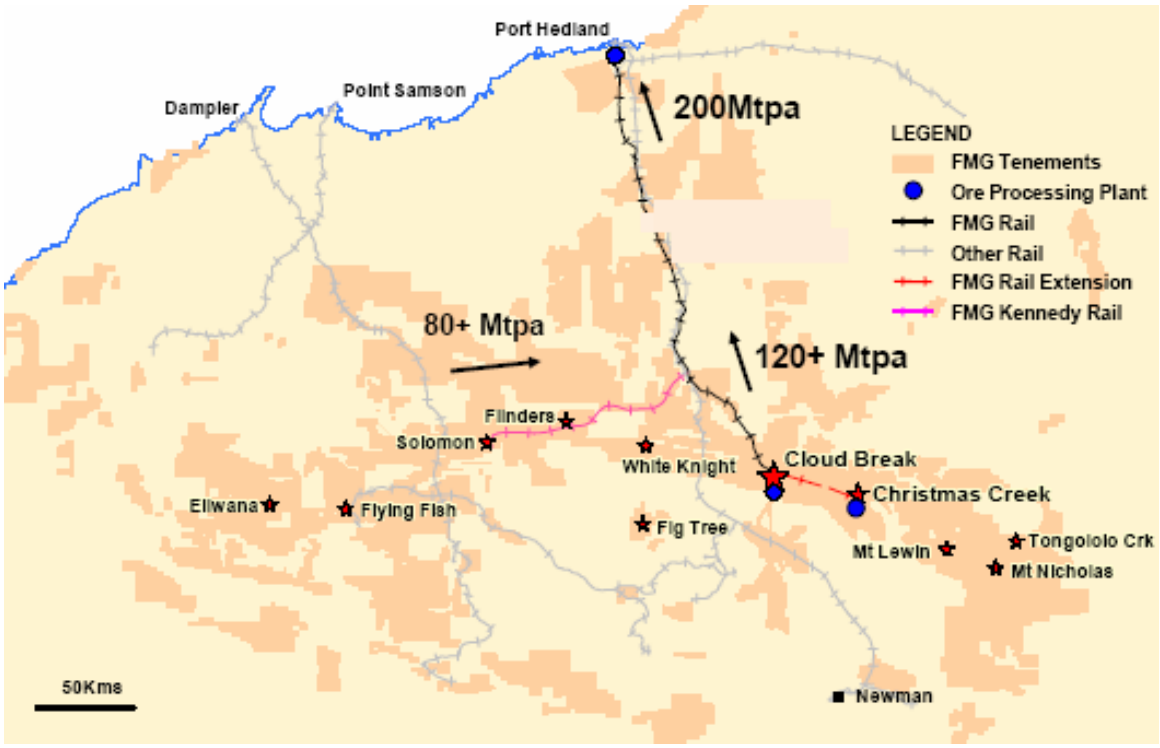
(b) installing an additional car dumper to deal with such a volume of ore would result, at least for a period, in significant unused car dumper capability.

SWORN by the said deponent at Perth, in the State of Western Australia, this 20th day of December 2007)

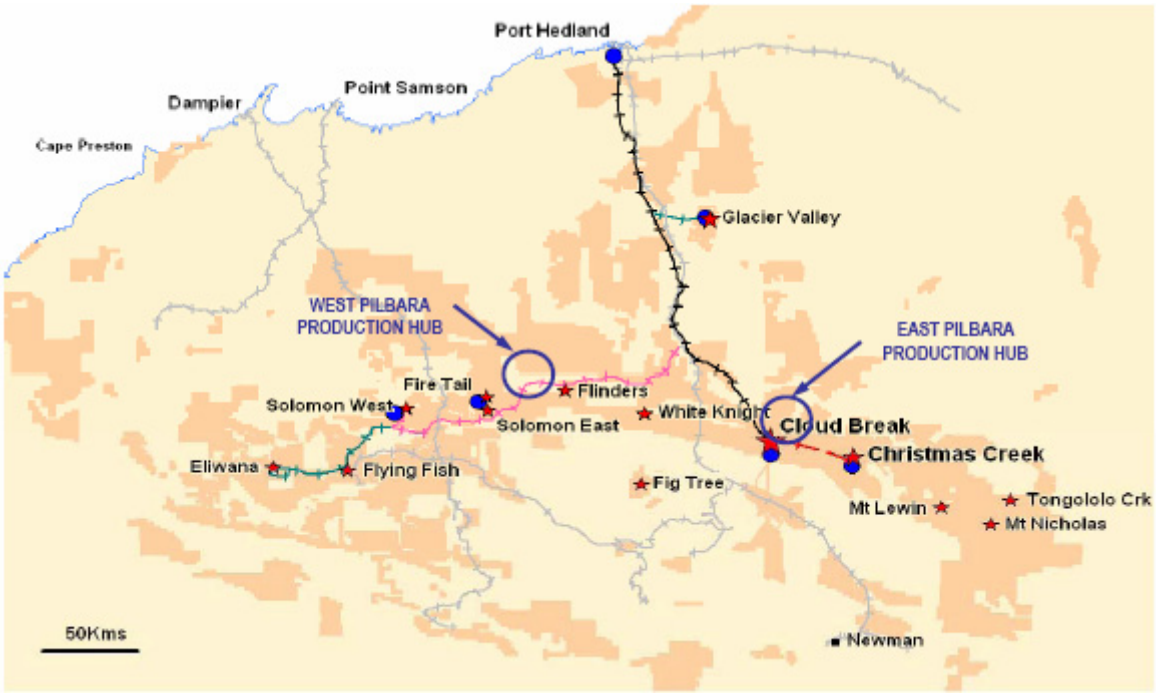
BEFORE ME:

DAVID ANTONY FLEMING
BLAKE DAWSON
221 GEORGE ST, SYDNEY NSW 2000
LEGAL PRACTITIONER OF THE SUPREME COURT OF NEW SOUTH WALES

MAPS SHOWING THE KENNEDY RAILWAY LINE, THE TPI RAILWAY LINE AND THE PROPOSED RAIL SPUR TO THE GLACIER VALLEY TENEMENT



Source: Fortescue's presentation to the Metal Bulletin Conference, "An Australian Story: A world of opportunity", dated 27 November 2007, page 11



Source: 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

INDIAN OCEAN

PORT HEDLAND

Pardoo project (Atlas)

RIDLEY MINES

ORD RANGES MINES

F13 NORTH MINE

GREAT NORTHERN HIGHWAY

Goldsworthy JV project (Polaris)

GOLDSWORTHY RAILWAY LINE

MT GOLDSWORTHY MINE

Mount Grant project (API)

MIDNIGHT RIDGE MINE

NIMINGARRA MINES

SUNRISE HILL MINES

HEMATITE HILL MINE

SHAY GAP MINES

CATTLE GORGE MINE

CUNDALINE RIDGE MINE

YARRIE MINES

CALLAWA MINE

Yarrie Mine

Shay Gap project (Jupiter)

NORTH WEST COASTAL HIGHWAY

MARBLE BAR ROAD

MT NEWMAN RAILWAY LINE

GREAT NORTHERN HIGHWAY

MARBLE BAR

TPI RAILWAY LINE POSITION APPROX.

Cloud Break Mine

Woodie Woodie Manganese project (Palmary)

600,000 650,000 700,000 750,000 800,000 850,000 900,000 950,000

7,750,000 7,700,000 7,650,000 7,600,000 7,550,000

0 10 20 30 40 50

Kilometres

Map Grid: MGA94 Zone 50
Datum: GDA 94

This map, compiled by Sinclair Knight Merz, is based on the Department of Industry and Resources' (DOIR) digital tenement boundaries (TENGRAPH) dated 31 March 2008.

The tenement layer consists of selected tenements (both granted and pending applications) that overlap in time and space, with complex relationships, but the depiction on the map is as if tenements form a simple 2D layer. Hence care should be taken in interpreting the colour-coded tenements and, where necessary, further details should be obtained from DOIR's online database TENGRAPH.

Legend

- BHPBIO Closed Mine
- BHPBIO Operational Mine
- Major Iron Ore Mines
- Railway
- Major Road
- Minor Road

Selected Tenements

- API
- Atlas
- Jupiter Mines
- Palmary
- Polaris

HOLDER	TENEMENT	STATUS
API	E 45/2603-I	LIVE
ATLAS	E 45/2330	LIVE
ATLAS	E 45/2667	LIVE
ATLAS	M 45/1006	PENDING
ATLAS	M 45/1007	PENDING
ATLAS	M 45/1157-I	LIVE
ATLAS	M 45/1158-I	LIVE
ATLAS	M 45/1159-I	LIVE
ATLAS	M 45/1170	PENDING
JUPITER MINES	E 45/2908-I	LIVE
PALMARY	M 45/743	PENDING
PALMARY	M 45/744	PENDING
PALMARY	M 45/930	PENDING
PALMARY	M 46/150	LIVE
PALMARY	M 46/383	PENDING
PALMARY	M 46/384	PENDING
PALMARY	M 46/385	PENDING
PALMARY	M 46/386	PENDING
PALMARY	M 46/387	PENDING
PALMARY	M 46/435	PENDING
POLARIS	E 45/2358-I	LIVE

NO	DATE	REVISION By approving revisions, the Designer/Contractor confirms that the Design Changes are in accordance with SEP 58	DES BY	DRN BY	CHK BY	APPD DES/ CON	BHPBIO	DATE
A	24/04 2008	Initial issue to client		MWE	IRJ			

BHPBIO TO COMPLETE

DRAWING STATUS APPROVAL	SIGNED	DATE	REV
PRELIMINARY ONLY			
QUOTATION ONLY			
CONSTRUCTION MAY PROCEED			
CONSTRUCTION MAY PROCEED EXCEPT AS NOTED			
REVISE AND RESUBMIT			

REVIEWER TO COMPLETE

COMPANY .....
NAME .....
SIGNED .....
DATE .....

THIS DRAWING HAS BEEN REVIEWED FOR GENERAL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT AND IS ISSUED FOR STATUS APPROVAL

DESIGNER/CONTRACTOR TO COMPLETE

COMPANY SKM
DESIGNED BY .....
DRAWN BY MWE
CHECKED BY IRJ
DESIGN & SAFETY APPROVED BY .....
DATE APPROVED .....

BHP Billiton Iron Ore Pty Ltd A.B.N. 46 008 700 981

LOCATION OF THE FIVE PROJECTS IDENTIFIED BY TPI PILBARA

SCALE

REFER SEP 40 FOR PREPARATION OF DRAWINGS

A1

DRG. NO. WV03352 G 051/A

I:\WVES\Projects\WV03352\Technical\Spatial\MXD\YarrieWV03352_G_051_A.mxd