

## ANNEXURE 1

### FMG PROPOSALS FOR IRON ORE AND INFRASTRUCTURE DEVELOPMENT IN THE PILBARA

#### INTRODUCTION

##### The Pilbara Iron Ore and Infrastructure Project

1. FMG proposes to develop the Pilbara Iron Ore and Infrastructure Project in the Pilbara region of WA (the **Project**).<sup>1</sup> FMG announced the infrastructure plan in 2003.<sup>2</sup> Under the proposal, FMG will develop several iron ore mines in the Pilbara (including Mindy Mindy, owned by Pilbara Iron Pty Ltd, in which it has a 50% interest), and the open-access rail and port infrastructure to facilitate export of the ore.
2. A description of the proposed Project is found in FMG's applications for environmental approval (Public Environmental Review (**PER**) documents), although recent announcements suggest that some of FMG's plans have changed.<sup>3</sup> According to FMG's PER's (Stage A dated September 2004 and Stage B dated January 2005), Stage A of the Project involves the construction and operation of a port at Port Hedland and a 345km North-South railway from Mindy Mindy to the port.<sup>4</sup> Stage B involves the development of iron ore mining operations that will use the Stage A infrastructure, and a 160km railway from the eastern-most mine site to the Stage A railway.<sup>5</sup>
3. According to the PER's, FMG initially plans to transport 45 mtpa of iron ore (from several FMG owned deposits and from the Mindy Mindy JV deposit)<sup>6</sup>, but the railway infrastructure is designed to be capable of transporting 100 mtpa.<sup>7</sup>

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<sup>1</sup> PER Stage A dated September 2004, p vii: FMG identifies the expansion of world steel production, predominantly driven by growth in China, as causing global demand for iron ore to exceed supply and fueling mining developments in the Pilbara.

<sup>2</sup> *The Australian*, "Twiggy's grand plan on track", 10 November 2003; see also FMG ASX Announcement 6 May 2005 referring to the "2003 original cost estimate".

<sup>3</sup> For example, in its Quarterly Report for the period ending 31 March 2004, FMG announced that it had dropped some mining leases including the mining lease for Mt Nicholas, the original centre of the Project.

<sup>4</sup> PER Stage A dated September 2004, p vii; PER Stage B dated 17 January 2005, p1.

<sup>5</sup> PER Stage A dated September 2004, p vii; PER Stage B dated 17 January 2005, p1.

<sup>6</sup> PER Stage B dated 17 January 2005, p2. See also FMG's Presentation to Fremantle Explorer Conference 24-25 February 2004 which states that FMG is targeting 40mtpa in its stand alone project; and 10mtpa in the Mindy Mindy project (50% owned by Consolidated Minerals) and (in a table comparing capital cost options) total FMG 45mtpa. In September 2004, FMG described the 45 mtpa figure as being a "post ramp up" target: FMG Media release 30 September 2004.

<sup>7</sup> PER Stage A dated September 2003, p vii. Cf the FMG/TPI State Agreement which requires the FMG Line to have a capacity of not less than 70 million tonnes: clause 10(2)(a)(i).

4. FMG has committed to building a railway line roughly adjacent to the Mt Newman Line, from Port Hedland to a point near the Shaw Siding and then east to Christmas Creek (referred to as the "FMG Line" in the Submission).<sup>8</sup> The FMG Line will be constructed by FMG/TPI irrespective of whether the Service is declared. FMG has stated:

*"As has previously been stated, the [NCC] application relates **only** to FMG's joint venture deposit at Mindy Mindy which is quite separate to its wholly owned deposits along the Chichester Ranges, The ability or otherwise of FMG being able to access the BHPB Newman line is not critical to the main project involving mining in the Chichester Ranges and the development of rail and port infrastructure to export this production from Port Hedland. **Regardless of the NCC outcome, FMG is still going to build its own railway line which in no way is contingent on the NCC declaration outcome.**"<sup>9</sup> (emphasis added)*

And:

*"The Mindy Mindy deposit is separate to, and some distance from, FMG's wholly owned deposits within the Chichester Ranges for which FMG's planned mining operation will be serviced by its own rail line and port facilities which are the subject of the recently signed State Agreement which provides authority to operate the infrastructure together with certainty of land tenure for the same...for FMG, access to the Mt Newman railway line is to "develop the small Mindy Mindy iron-ore deposit which is separate from Fortescue's main Chichester Range project for which it is planning to build its own railway line".*

*To summarise and to avoid any confusion, FMG confirms that a successful Declaration application is not required for the development and implementation of its integrated Chichester Range project which is progressing independently of the NCC process and being underpinned by the expanding iron ore resources defined within the Christmas Creek Area and Mt Nicholas deposits."<sup>10</sup>*

5. There have been several firm commitments made by FMG in relation to the construction of the FMG Line. FMG has continued to make representations about the construction of an FMG railway to Mindy Mindy even after making public commitments in relation to the FMG Line and FMG has recently promoted the fact that its PER Stage A is nearing final approval stage, without suggesting that the route of the railway line the subject of that document has been revised.<sup>11</sup>

### **Ownership of the development - The Pilbara Infrastructure Pty Ltd (formerly Pilbara Infrastructure Fund Pty Ltd)**

6. FMG is the owner and proponent of the Project.<sup>12</sup> It holds 50% of the issued capital in Pilbara Iron Ore Pty Ltd, the company which holds the Mindy Mindy tenements.<sup>13</sup>

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<sup>8</sup> This is clear from the obligations FMG has taken on under the FMG/TPI State Agreement (discussed below) and the arrangements it has made for construction of the infrastructure and sale of the ore.

<sup>9</sup> FMG Quarterly Report for the period ending 31 December 2004.

<sup>10</sup> FMG ASX Announcement 11 January 2005.

<sup>11</sup> See FMG Quarterly Report for the period ending 31 March 2005 where FMG states: "Good progress has been achieved in the environmental approval with both Stage A and Stage B having finished their respective public review period. Fortescue ... has confirmation from the Environmental Protection Agency... that it has no further issues for Stage A..."

<sup>12</sup> PER Stage B dated 17 January 2005, p xi.

Ownership of the port and rail facilities will reside in a separate entity – The Pilbara Infrastructure Pty Ltd (**TPI** - formerly the Pilbara Infrastructure Fund).<sup>14</sup> TPI is currently a wholly owned subsidiary of FMG,<sup>15</sup> however FMG has announced an intention to list TPI on the Australian or an international stock exchange and ultimately hold only around 40% of TPI.<sup>16</sup>

## State Agreements

7. TPI and FMG have entered into an agreement with the State of Western Australia dated 10 November 2004 (the **FMG/TPI State Agreement**). This agreement has been ratified by and is scheduled to the *Railway and Port (The Pilbara Infrastructure Pty Ltd) Agreement Act 2004 (WA)*, a copy of which is included in the **Supporting Documents**.
8. It is evident from the FMG/TPI State Agreement that TPI will develop and is intended to be the operator of multi-user facilities, being:
  - (a) the FMG Line for the rail transport of iron ore to Port Hedland; and
  - (b) the FMG Port for the shipment of iron ore, ex-Port Hedland.
9. The operative provisions of the FMG/TPI State Agreement have not yet come into operation because of the condition in clause 3(2), requiring another State Agreement to be entered into in relation to FMG's mining operations (which is intended to be the cornerstone user of the FMG/TPI rail and port facilities). This condition is due to be met by 31 December 2005.<sup>17</sup> FMG expects to sign a State Agreement in relation to its mining operations in June 2005 (see below).
10. TPI is due to submit detailed proposals for its port and rail operations by 31 December 2005 (unless extended by the Minister).<sup>18</sup>

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<sup>13</sup> PER Stage B dated 17 January 2005, p xi. The other Mindy Mindy joint venturer is ConsMin which is the manager of the Mindy Mindy project.

<sup>14</sup> In July 2004, FMG stated that its rail and port assets were to be held by a separate legal entity – the Pilbara Infrastructure Fund: FMG Quarterly Report for the period ending 30 June 2004. On 23 August 2004, FMG stated that its rail project would be held separately by a new entity called The Pilbara Infrastructure (**TPI**): FMG Media Release 23 August 2004. ASIC records confirm that TPI was formerly named the Pilbara Infrastructure Fund.

<sup>15</sup> Company search dated 19 May 2005.

<sup>16</sup> On 7 May 2004, FMG shareholders voted to sell up to 60% of the Pilbara Infrastructure Fund "so as to ensure that Fortescue Metals will not hold a majority ownership of the new open-access facilities" and FMG stated that it was envisaged that after the commissioning of the infrastructure, the Pilbara Infrastructure Fund would be floated on the Australian and an international Stock Exchange: FMG Quarterly Report for the period ending 30 June 2004. In August 2004, FMG said that it had previously announced its intentions of retaining only a maximum 40% interest in TPI which may be listed on international stock exchanges: FMG Media Release 23 August 2004.

<sup>17</sup> FMG/TPI State Agreement clause 3(3).

<sup>18</sup> FMG/TPI State Agreement clauses 7(1), 8(1) and 10(1).

11. The proposals to be submitted by TPI to the Minister for approval must include details of the railway and port facilities and any additional infrastructure. The proposals in relation to the railway must provide:
  - (a) for the railway to have capacity to transport at least 70 mtpa of ore;<sup>19</sup> and
  - (b) for the railway to have characteristics to enable (either without modification or with reasonable modifications):
    - (i) rail operations of the kind carried out on the other Pilbara iron ore railways to be carried out on the FMG/TPI railway; and
    - (ii) connection of the FMG/TPI railway to any one or more of the other Pilbara iron ore railways.<sup>20</sup>
12. Once its proposals are approved, TPI must, in accordance with the proposals, construct the railway and port facilities,<sup>21</sup> and keep them in operation.<sup>22</sup>
13. Clause 16 of the FMG/TPI State Agreement deals with access obligations in relation to the railway. In particular, clause 16(2)(a) provides that the State and TPI "intend that the [*Railways (Access) Act 1998 (WA) (Access Act)*] and the [*Railways (Access) Code 2000 (WA) (Access Code)*] shall apply to the Railway as soon as possible after the Railway is constructed but before the Railway Operation Date".<sup>23</sup>
14. The Access Act and the Access Code will apply to and in respect of the Railway "but not to [TPI]'s rolling stock, rolling stock maintenance facilities, office buildings, housing, freight centres, terminal yards and depots and any other facilities which are not railway infrastructure (as that term is defined in the Access Act)".<sup>24</sup>

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<sup>19</sup> FMG/TPI State Agreement clause 10(2)(a).

<sup>20</sup> FMG/TPI State Agreement clause 10(2)(a).

<sup>21</sup> FMG/TPI State Agreement clauses 15(1), 17(1)

<sup>22</sup> FMG/TPI State Agreement clauses 15(2), 17(1)

<sup>23</sup> The Access Act provides (among other things) that the Minister is to establish a Code in accordance with the Act, to give effect to the Competition Principles Agreement in respect of railways to which the Code provides (s4(1)).

The Access Code sets out a framework for negotiation and regulation of third party access. For example, where a proposal is made by an entity, the railway owner must negotiate in good faith with the entity with a view to making an access arrangement in respect of the route (s13(1)). This duty is subject to the proponent showing it has managerial and financial ability (s14), showing that its operations are within the capacity of the route or expanded route (s15), and meeting certain notice requirements under s19(3) (see s13(2)).

The Access Code details the general duties of the railway owner in negotiations (s16), the matters to be covered in negotiations (s17 and Schedules 3 and 4), and the negotiation period. The Access Code also provides for arbitration of disputes (Part 3 Division 3), and other matters relating to access.

<sup>24</sup> FMG/TPI State Agreement, clause 16(3). See also clause 16(1)(a): "access" includes use by persons of the Railway and the Company's access roads within the Railway Corridor and within the Port Railway Area but does not, for the purposes of subclause 5(c) or (7)(a) include use of the Company's rolling stock, rolling stock maintenance facilities,

15. During the period prior to the Access Date,<sup>25</sup> subject to clause 16(4)(b), no agreement for access to the Railway or provision of rail transport services over the Railway (including for purposes of transport of iron ore products, freight goods or other products) shall be made without the prior consent of the Minister.<sup>26</sup>
16. Clause 16(4)(b) provides that one or more agreements for access to the Railway or provision of rail transport services over the Railway for the purposes of the transport of iron ore products may be made without the prior consent of the Minister, but such agreements:
  - (a) shall only be entered into by the Company;<sup>27</sup>
  - (b) shall not, either alone or when taken together, allow or provide for the transport (whether by TPI or any other person using the Railway) of more than 45 million tonnes of iron ore products over the Railway in any year during the currency of this Agreement;<sup>28</sup> and
  - (c) shall comply with clause 16(5).<sup>29</sup>
17. Clause 16(5) requires (among other things), that "each agreement for access to the Railway or provision of rail transport services over the Railway entered into prior to the Access Date... does not impose on [TPI] obligations, or create in favour of any other person any interest, in relation to the Railway (including in relation to allocation of train paths on the Railway and management of train control for the Railway) which may in effect preclude other entities from access to the Railway in accordance with the Access Act and the Access Code".<sup>30</sup>
18. Clause 16(7) of the FMG/TPI State Agreement provides that TPI shall:
  - (a) use all reasonable endeavours to promote access to, and attract customers for, the Railway; and
  - (b) not without the prior consent of the Minister enter into or allow to be entered into any agreement or arrangement, or otherwise adopt any practice, whereby the Railway is connected to another railway for the purpose of running rolling stock in

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office buildings, housing, freight centres, terminal yards and depots or other facilities which are not railway infrastructure (as that term is defined in the Access Act).

<sup>25</sup> "Access Date" means the date on which all of the documents and matters referred to in [clause 16(8)(c)] are approved and determined under the relevant section of the Access Act or Access Code: see FMG/TPI State Agreement, clause 16(1)(b).

<sup>26</sup> FMG/TPI State Agreement, clause 16(4)(a).

<sup>27</sup> FMG/TPI State Agreement, clause 16(4)(b)(i).

<sup>28</sup> FMG/TPI State Agreement, clause 16(4)(b)(ii).

<sup>29</sup> FMG/TPI State Agreement, clause 16(4)(b)(iii).

<sup>30</sup> FMG/TPI State Agreement, clause 16(5)(c).

a circuit over them, or whereby the Railway otherwise does not or cannot accommodate traffic moving in both directions.

19. The FMG/TPI State Agreement also specifies that TPI shall ensure compliance with certain provisions of the Access Act and Access Code,<sup>31</sup> and "... do all things as are reasonable" to facilitate the approval or determination of specified matters under the Access Code,<sup>32</sup> as soon as possible after the Access Act and Access Code apply to the Railway.
20. Before submitting detailed port proposals, TPI is obliged:
  - (a) to consult with the Minister and reach agreement on the location of its Port Lease and the nature and characteristics of its Port Facilities – clause 8(1);
  - (b) in doing so, to have conducted studies and investigations of those matters – clause 5; and
  - (c) prior to 31 December 2005 (unless extended by the Minister) to submit to the Minister, its "detailed proposals" on the "location, area, layout, design, materials and time of commencement and completion" of a range of matters including port facilities, for approval or otherwise by the Minister (broadly within two months of submission) – clause 11.

If approval of all of the detailed proposals is not granted by 31 December 2006, the State Government of WA may give 12 months notice of termination of the FMG/TPI State Agreement – clause 11(6).

21. BHP Billiton understands that the subject of port capacity and future port development may be canvassed during negotiations and discussions in relation to the development of the port, as referred to above.
22. TPI must put into place, before its port infrastructure becomes operational, an "access regime" in relation to the port infrastructure which is approved by the Minister – clause 18(2). In considering the "access regime", the Minister must have regard to clause 6(4) of the CPA.
23. The Minister must approve any access arrangement made by TPI prior to the commencement of the access regime where that arrangement (or a number of arrangements together) accounts for less than 45 mtpa of iron ore products, and the arrangements comply with the access regime and do not preclude other entities from access – clauses 16(4) and (5).
24. The TPI port facilities may not be used for "Government Agreement Product" (ie iron ore sourced from an existing producer) without the Minister's consent – clause 11(9).

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<sup>31</sup> See FMG/TPI State Agreement, clause 16(8)(a) and (b).

<sup>32</sup> See FMG/TPI State Agreement, clause 16(8).

25. FMG is in the process of negotiating another State Agreement to cover the mining operations which it now expects to be signed by the end of June 2005.<sup>33</sup>

## CONTRACTUAL COMMITMENTS

### Development agreements in place

26. In August 2004, FMG announced that it had entered into a binding "build and transfer" contract with China Railway Engineering Corporation (**China Rail**) to build and finance the railway component of the Pilbara Iron Ore and Infrastructure Project.<sup>34</sup> Mr Forrest explained that under such contracts, the provider will design, build, commission and then transfer the facility to the customer once performance specifications have been met.<sup>35</sup> The China Rail contract relates to the rail line from the Chichester Ranges to Port Hedland (the FMG Line), and covers all earthworks, culverts, bridges, rail, sleeper and rolling stock requirements for the new line.<sup>36</sup> FMG's "rail link", with a contract amount estimated at A\$700 million, will be the "largest component in [its] Pilbara project which also includes a proposed A\$410 million iron ore mine and \$470 million in new port facilities at Port Hedland".<sup>37</sup>
27. FMG has also executed agreements with China Harbour Engineering Corporation (**China Harbour**)<sup>38</sup> and Metallurgical Group of China (**China Metallurgical**)<sup>39</sup> in relation to design, build and finance arrangements for the Port Hedland ship loading and stockyard facility and mine processing plant.<sup>40</sup> According to FMG, China Metallurgical will provide a financing, design and construction package for the mine and beneficiation plant at Christmas Creek.<sup>41</sup> China Harbour will provide the financing, design and construction for the large-scale works covering the dredging, train unloading, ore stacking, blending and ship loading facilities at Anderson Point in Port Hedland.
28. Under these three arrangements (which FMG described as establishing a broad platform for the delivery of the three major component parts – rail, port and mine – of its A\$1.85 billion Pilbara Iron Ore and Infrastructure Project) a payment structure has been agreed whereby

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<sup>33</sup> PER Stage B dated 17 January 2005, p xv. FMG Quarterly Report for the period ending 31 March 2005.

<sup>34</sup> FMG ASX Announcement 23 August 2004.

<sup>35</sup> FMG Media Release 23 August 2004.

<sup>36</sup> FMG Media Release 23 August 2004.

<sup>37</sup> FMG Media Release 23 August 2004; FMG Quarterly Report for the period ending 30 September 2004.

<sup>38</sup> Announced on 5 November 2004: FMG ASX Announcement 5 November 2004. This document (framework agreement) was released to the ASX on 31 March 2005.

<sup>39</sup> Announced on 5 November 2004: FMG ASX Announcement 5 November 2004. This document (framework agreement) was released to the ASX on 29 March 2005.

<sup>40</sup> FMG Quarterly Report for the period ending 31 December 2004, p2.

<sup>41</sup> FMG Media Release 5 November 2004.

10% is payable on commencement of work and the balance is only paid after practical completion is declared.<sup>42</sup>

29. The tables in **Attachment 1** to this annexure set out FMG's indicative funding and costs estimates as at March 2005.<sup>43</sup>
30. In late March 2005, newspaper reports indicated that China Metallurgical had denied there were any binding contracts with FMG that tied the Chinese companies into funding and constructing infrastructure. The reports also suggested that the Chinese companies would not pursue the agreements if they could not acquire a majority interest, and that the companies were seeking further information about the quality of FMG's deposits.<sup>44</sup> In response, FMG released copies of the three agreements.
31. FMG has negotiated an agreement with ThyssenKrupp for preferred supplier status for materials handling and processing equipment.<sup>45</sup> ThyssenKrupp has signed a Memorandum of Understanding with China Harbour and China Metallurgical in relation to the FMG project.<sup>46</sup> BGC have also signed a similar Memorandum of Understanding with China Metallurgical.<sup>47</sup> Barclay Mowlem previously entered into a Memorandum of Understanding with China Rail.<sup>48</sup>

In its Quarterly Report for Q4 2004, FMG indicated that negotiations were continuing with Australian ore wagon and locomotive suppliers with a view to forming an alliance for the design, supply and ongoing maintenance of the rolling stock.<sup>49</sup>

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<sup>42</sup> FMG Quarterly Report for the period ending 31 December 2004, p3. FMG explains that this gives the construction party the majority of the risk, and because the 90% balance is to be paid in stages, it will provide a medium term finance facility.

<sup>43</sup> FMG has subsequently foreshadowed an increase in cost estimates since. As noted above, on 6 May 2005, FMG confirmed that the ultimate capital cost "would likely be a two billion plus number rather than the one billion plus figure provided for in the original 2003 cost estimate": FMG ASX Announcement 6 May 2005.

<sup>44</sup>AFR: "Doubts hit Fortescue's iron-ore project", 24 March 2005.

<sup>45</sup> FMG Quarterly Report for the period ending 31 December 2004, p13. At that time similar discussions were also advanced with ABB. Both China Harbour and China Metallurgical had accepted ThyssenKrupp as preferred supplier for materials handling equipment.

<sup>46</sup> FMG ASX Announcement 8 November 2004 (see also 5 November 2004 announcement).

<sup>47</sup> FMG ASX Announcement 8 November 2004.

<sup>48</sup> FMG ASX Announcement 8 November 2004.

<sup>49</sup> FMG Quarterly Report for the period ending 31 December 2004, p12. FMG explained: "It is intended that any such arrangement would be as a sub contract agreement to the overarching China Rail contract."



## FMG Sales<sup>50</sup>

32. By February 2004, FMG had entered into MOU long term sales agreements for almost 80% of planned initial production.<sup>51</sup> By the end of Q3 2004, FMG executed its first three binding sales contracts which provided for a total delivery commitment of 8 mtpa to China-based customers.<sup>52</sup> In January 2005, FMG announced that it had signed a further sales contract with an international steel mill for the delivery of 1.5 mtpa of iron ore for 20 years, with a A\$23 million prepayment obligation to be paid in instalments.<sup>53</sup> As a result, FMG has committed contracts with customers for 9.5mtpa, or 21% of planned capacity, which provide for prepayments totalling A\$90 million.<sup>54</sup>
33. In April 2005 FMG confirmed that the \$10 million prepayment by Hebei Wenfeng Iron & Steel would be in the form of steel not cash, but that the other three sales agreements were based on cash only prepayments.<sup>55</sup>
34. In May 2005, FMG announced that it had agreed to a request by Pingxiang Iron and Steel Co Ltd to defer its prepayment of US\$10 million (due May 2005) so that the payment is now due at financial close.<sup>56</sup>
35. On 6 May 2005, FMG confirmed to the ASX its expectation that its product would be sold at a 5% discount to the benchmark Rio Tinto/BHPB price. FMG stated that this was

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<sup>50</sup> On 31 March 2005, FMG released a sample off-take agreement – with counterparty and quantity details omitted: FMG ASX Announcement 31 March 2005.

<sup>51</sup> FMG ASX Announcement 12 February 2004. In its Quarterly Report for the period ending 31 March 2004, FMG stated that it had MOUs for 100% of planned production (40mtpa).

<sup>52</sup> FMG Quarterly Report for the period ending 30 September 2004, pp2-3. The customers were as follows:

- China's Hebei Wenfeng Iron & Steel Co Ltd – 20 years, at 2 mtpa, prepayment of A\$10 million following "Financial Close";
- Jiangsu Fengli Group Co. Ltd – 20 years, 4 mtpa (once planned production rates of 45mtpa are achieved), prepayment of US\$20 million (of which US\$10m to be settled at the commencement of construction "in early 2005" and the balance of US\$10 million payable on first shipment from Anderson Point to Fengli) – Fengli also bought 7 million shares in FMG; and
- Ping Xiang Iron & Steel Co Ltd – 22 year supply, 2 million tonnes per annum, pre-payment of US\$20 million (in instalments).

FMG described the prepayment clauses as "a key factor in all three contracts" and contributing A\$66 million in prepayments. In addition, FMG stated that it had MOUs for more than 95% of its initial production target (less contracted amounts). See also FMG ASX Announcements 6 October 2004, 13 October 2004, 21 October 2004; FMG Media Release on 13 October 2004.

<sup>53</sup> FMG ASX Announcement 23 January 2005; FMG Quarterly Report for the period ending 31 December 2004, p4.

<sup>54</sup> FMG Quarterly Report for the period ending 31 December 2004, p5.

<sup>55</sup> FMG ASX Announcement 8 April 2005.

<sup>56</sup> FMG ASX Announcement 17 May 2005.

consistent with its plans to sell its product at standard industry prices for Marra Mamba products.<sup>57</sup>

## DEPOSITS

36. **Attachment 2** to this Annexure illustrates the locations of the FMG deposits.
37. **Attachment 3** to this Annexure sets out details of the size and quality of the principal resources announced by FMG.
38. FMG has announced that it will develop four principal mining areas: three in the Chichester Ranges (Christmas Creek, Mt Lewin and Mt Nicholas mines) and one on the edge of the Hamersley Ranges (Mindy Mindy mine) as part of Stage B of its project.<sup>58</sup>
39. In its PERs, FMG indicated that Mindy Mindy will produce direct shipped<sup>59</sup> ore (ie beneficiation is not required)<sup>60</sup> and that ore from the Chichesters would be beneficiated.<sup>61</sup> Subsequently, FMG has announced the existence of significant volumes of higher grade material (particularly in the Christmas Creek area) and that, therefore, not all iron ore from the Chichester deposits will be beneficiated.<sup>62</sup> A beneficiation plant will be located first in the Christmas Creek mine area, and will, according to statements made in January 2005, later be relocated to Mt Nicholas.<sup>63</sup> (However, according to its Quarterly Report for the period ending 31 March 2005, FMG has now withdrawn its mining lease application over Mt Nicholas and part of Mt Lewin.<sup>64</sup>)
40. Ore from the Chichesters is Marra Mamba type ore.<sup>65</sup> FMG has announced discovery of significant quantities of microplaty haematite in varying concentrations from Mt Nicholas,

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<sup>57</sup> FMG ASX Announcement 6 May 2005.

<sup>58</sup> PER Stage B dated 17 January 2005, pxi; PER Stage A dated September 2003, p4. More recently, FMG has announced discovery of a significant mineralisation at Cloud Break: FMG ASX Announcement 6 February 2005.

<sup>59</sup> FMG ASX Announcement 27 April 2005 explains that FMG uses the term "direct ship ore" to refer to that part of the submission. In its media release on 16 August 2004, FMG explained that "direct ship" ore has two significant advantages: it can be mined and exported immediately without further treatment; and it has better sintering and blast furnace characteristics in-situ at the mill than ore requiring pre-treatment in Australia or overseas ahead of processing.

<sup>60</sup> PER Stage A dated September 2004, p31.

<sup>61</sup> PER Stage A dated September 2004, p31. See PER Stage B dated 17 January 2005 p74-77 for details of beneficiation plant.

<sup>62</sup> FMG ASX Announcement 15 March 2005.

<sup>63</sup> PER Stage B dated 17 January, p74. This is consistent with the Christmas Creek mine being mined for the first 8 years and the other three mines being mined in combination for the remaining twelve years according to customer product requirements (p74).

<sup>64</sup> FMG Quarterly Report for the period ending 31 March 2005.

<sup>65</sup> Various, eg FMG ASX Announcement 15 March 2005.

through Mt Lewin to Christmas Creek.<sup>66</sup> According to FMG, microplaty haematite is prized by steel mills for its blast furnace properties, especially its slow decrepitation characteristic (propensity to break down and clog up a blast furnace).<sup>67</sup>

41. FMG first announced "resource"<sup>68</sup> estimates for its Christmas Creek, Mt Lewin and Clayton's Hammer deposits on the area drilled to 30 September 2004: 744Mt with an average mineralisation of 56.4% in ground (much of which requiring beneficiation).<sup>69</sup>
42. Following various upgrades to the FMG resource estimates,<sup>70</sup> it now claims to have 2 billion tonnes of mineralisation in the Chichesters, of which some 400Mt is higher grade "direct ship" ore not requiring beneficiation.<sup>71</sup>
43. As at April 2005, FMG held, or had applied for, a total of 17,200km<sup>2</sup> of tenements in the Pilbara.<sup>72</sup> FMG has promoted the size of its tenements on many occasions.
44. However, FMG has not announced any reserves.<sup>73</sup>

### **Mindy Mindy<sup>74</sup>**

45. Mindy Mindy is owned through a 50-50 incorporated joint venture between FMG and ConsMin.<sup>75</sup>

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<sup>66</sup> FMG ASX Announcement 16 August 2004. Note, however, that when questioned by the ASX about a newspaper article stating that FMG had found at least 100 million tonnes of microplaty haematite, FMG stated that "JORC defined" resources at Christmas Creek would be announced by 30 September 2004. Further statements in relation to the microplaty haematite and quality issues were made in August 2004: FMG ASX Announcement 31 August 2004.

<sup>67</sup> FMG ASX Announcement 16 August 2004.

<sup>68</sup> "Resource" is a technical term and must be used in accordance with the JORC Code (see **Annexure 2** for details).

<sup>69</sup> FMG ASX Announcement 30 September 2004.

<sup>70</sup> Eg Further announcement on Chichester resources on 17 November 2004 – 1.241 billion tonnes of "JORC compliant" ore resources across all of FMG's projects in the Chichesters, including Christmas Creek Area (850m) and Mt Nicholas: FMG Media Release 17 November 2004.

<sup>71</sup> FMG ASX Announcement 23 March 2005. Cf earlier statements: There is 1.604 billion tonnes of deposit in the Chichesters, with an in-ground average iron grade of 60.2% FMG ASX Announcement 15 March 2005 ; There is 1.241 billion tonnes of deposit in the Chichesters, with an in-ground average iron grade of 60.2%, ASX announcement February 6 2005.

<sup>72</sup> Quarterly Report for the period ending 31 March 2005. In December 2004, 17,118km<sup>2</sup>: FMG Quarterly Report for the period ending 31 December 2004, p14. See this reference also for details of mining and exploration licence applications made in that quarter. And, in March 2005 FMG announced an agreement with diamond miner, Flinders Diamonds Ltd and Prenti Exploration Pty Ltd, to swap exclusive mining rights on various tenements in the Pilbara: FMG ASX Announcement 31 March 2005.

<sup>73</sup> FMG ASX Announcement 27 April 2005 and FMG ASX Announcement 17 November 2004 in relation to Christmas Creek Area. For the meaning of "resource" and "reserve", see **Annexure 2**.

<sup>74</sup> See also **Annexure 4** in relation to statements by ConsMin.

<sup>75</sup> The incorporated joint venture is Pilbara Iron Ore Pty Ltd.

46. Despite early indications,<sup>76</sup> compared to the Chichester Ranges project, little information has been provided by FMG or ConsMin about the Mindy Mindy project.<sup>77</sup>
47. In February 2004, FMG indicated that the target production from Mindy Mindy was 10mtpa.<sup>78</sup> In its PER Stage B, FMG indicated that there is a 68Mt estimated resource at Mindy Mindy and that its life would be 6 years.<sup>79</sup>
48. In its Quarterly Report for Q3 2004, FMG stated that it had applied for a mining lease application over Mindy Mindy, and that a second survey had been completed at Mindy Mindy.<sup>80</sup>
49. FMG has stated that Mindy Mindy is not of sufficient size to justify its own infrastructure.<sup>81</sup> FMG has confirmed that its declaration application relates only to Mindy Mindy which is quite separate to its wholly owned deposits along the Chichester Ranges.<sup>82</sup> The ability or otherwise of FMG to access the Mt Newman Line is not critical to the main project involving mining in the Chichester Ranges and the development of rail and port infrastructure to export this production from Port Hedland.<sup>83</sup>
50. No resource has been announced at Mindy Mindy.<sup>84</sup>

### **Christmas Creek**

51. FMG's Christmas Creek Project includes ground which was previously held by Rio Tinto,<sup>85</sup> and which was previously the subject of drilling by BHPB and others since 1960.<sup>86</sup>

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<sup>76</sup> See reports on drilling in Mindy Mindy area in FMG's Quarterly Reports for the periods ending September 2003 and December 2003: "Drilling at the Mindy Mindy prospect has outlined a sizeable direct-ship iron ore resource". On 17 October 2003, ConsMin indicated to the ASX that it expected to receive preliminary results in the next two weeks. In its Quarterly Report for the period ending 31 December 2003, FMG indicated that it expected to provide "resource tonnage and grade estimate to JORC standards" in relation to Mindy Mindy during the March 2004 quarter (at p11). At 20 May 2004, FMG's website stated: "The Company is involved in a 50/50 JV with Consolidated Minerals, which is nearing completion of resource identification at Mindy Mindy."

<sup>77</sup> For information on ConsMin's announcements on Mindy Mindy see **Annexure 4**.

<sup>78</sup> FMG stated that Mindy Mindy was targeting 10mtpa and that FMG standalone projects were targeting 40mtpa. FMG Presentation to Explorer Conference, Fremantle 24-25 February 2004. Cf ConsMin statement in an open briefing on 13 April 2005, estimating production of 5mtpa over a 15 year life (ie total of 75 million tonnes).

<sup>79</sup> PER Stage B dated 17 January 2005, pxii – xii; p83.

<sup>80</sup> FMG Quarterly Report for the period ending 30 September 2004.

<sup>81</sup> FMG Quarterly Report for the period ending 30 June 2004.

<sup>82</sup> For example: FMG Quarterly Report for the period ending 31 December 2004, p13:

<sup>83</sup> FMG Quarterly Report for the period ending 31 December 2004, p13: "Regardless of the NCC outcome, FMG is still going to build its own railway line which is no way contingent on the NCC declaration outcome."

<sup>84</sup> In its Open Briefing on 12 April 2005, ConsMin Managing Director stated: "We're currently drilling Mindy Mindy to an indicated resource status and next year we'll bring it into a reserve category in preparation for mining."

<sup>85</sup> FMG ASX Announcements 2 April 2004, 10 May 2004.

52. FMG initially focussed on its Mt Nicholas ore body. However, in July 2004 it announced its decision to focus initial mine and processing development on the Christmas Creek deposits.<sup>87</sup>
53. In August 2004, FMG announced that significant tonnages of direct ship ore had been discovered at its Christmas Creek tenements.<sup>88</sup>
54. In June 2005, FMG updated its Christmas Creek resource estimate to over 1 billion tonnes with average in-ground Fe content of 58.2%;<sup>89</sup> 587 Mt at 58.4% Fe (indicated) and 558 Mt at 57.8% Fe (inferred).<sup>90</sup>
55. FMG also announced that 377Mt of the 1 billion tonnes resource estimate is "direct ship" – high grade material with average Fe grade of more than 60%;<sup>91</sup> 230Mt at 60.3% Fe (indicated), 147Mt at 60.1% Fe (inferred).<sup>92</sup>
56. The remaining 768Mt will have an average head grade of over 57% Fe, amenable to conversion into the target product grade of 60% Fe through "standard" Pilbara iron ore beneficiation processes.<sup>93</sup>
57. FMG has revised its initial estimate of at least 1 billion tonnes from the Christmas Creek area to 1.145 billion tonnes.<sup>94</sup>
58. The total mineralisation target for Christmas Creek and Cloud Break is 1.8 billion tonnes for a 20 year mine life.<sup>95</sup>

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<sup>86</sup> FMG ASX Announcement 10 May 2004.

<sup>87</sup> FMG Media release 19 July 2004.

<sup>88</sup> FMG ASX Announcement 16 August 2004.

<sup>89</sup> FMG ASX Announcement, 2 June 2005; Cf Fe content of 58.02% announced in March 2005: (FMG ASX Announcement, 15 March 2005; FMG Quarterly Report for the period ending 31 March 2005); Cf Indicated and inferred JORC resource = 850Mt with an average in ground Fe of 56.7%: (FMG ASX Announcement 17 November 2004).

<sup>90</sup> FMG ASX Announcement, 2 June 2005; Cf 372mt at 58.2% Fe (indicated) and 644mt at 57.9% Fe (inferred): (FMG ASX Announcement, 15 March 2005).

<sup>91</sup> Cf: 273Mt of high grade material announced in March 2005: (FMG ASX Announcement, 15 March 2005); Cf 197Mt of high grade material with an average in ground Fe of 60.2%: (FMG ASX Announcement 17 November 2005). FMG said that this was sufficient to supply the first 5 years of planned production, including the first year ramp up, without a requirement for beneficiation: (FMG ASX Announcement, 17 November 2004).

<sup>92</sup> FMG ASX Announcement, 2 June 2005; Cf 273Mt estimated high grade material announced in March 2005: (FMG ASX Announcement, 15 March 2005).

<sup>93</sup> FMG ASX Announcement, 2 June 2005; Cf remaining 743Mt announced in March 2005: (FMG ASX Announcement, 15 March 2005).

<sup>94</sup> FMG ASX Announcement, 2 June 2005; Cf 1.2 billion tonnes in March 2005: (FMG ASX Announcement, 15 March 2005).

<sup>95</sup> FMG Presentation to Sydney Mining Club Luncheon 6 May 2005.

### **Mt Lewin (and the Hammer)**

59. This deposit has an announced resource of 198Mt<sup>96</sup> at an average 56.5% Fe.<sup>97</sup>
60. Mt Lewin and the Hammer are sometimes grouped collectively with Christmas Creek as "the Christmas Creek area" in FMG's statements.<sup>98</sup>
61. In April 2005, FMG announced that it had taken steps to withdraw its mining lease application over part of the Mt Lewin prospects.<sup>99</sup>

### **Mt Nicholas**

62. This is FMG's original exploration ground.<sup>100</sup>
63. FMG has announced a 391 Mt resource<sup>101</sup> at an average of 49.5% Fe.<sup>102</sup>
64. In April 2005, FMG announced that it had taken steps to withdraw its mining lease application over Mt Nicholas.<sup>103</sup>

### **Cloud Break**

65. FMG announced commencement of exploration drilling at Cloud Break in November 2004.<sup>104</sup> In February 2005, FMG announced that it had discovered a new commercially significant iron ore mineralisation (Cloud Break).<sup>105</sup> The Cloud Break deposits are located adjacent to the FMG Line and are 60 km closer to Port Hedland than Christmas Creek.<sup>106</sup>
66. In March 2005, FMG announced that its Inferred Resource estimate at Cloud Break was 390Mt at 58.4%Fe, of which 116 Mt was 61%Fe (also Inferred).<sup>107</sup> FMG announced that its target mineralisation for the Cloud Break region is 600-650Mt.<sup>108</sup>

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<sup>96</sup> FMG ASX Announcement 15 March 2005.

<sup>97</sup> FMG Presentation to Sydney Mining Club Luncheon 6 May 2005 (also states 200Mt).

<sup>98</sup> FMG ASX Announcement 15 March 2005.

<sup>99</sup> FMG Quarterly Report for the period ending 31 March 2005.

<sup>100</sup> FMG ASX Announcement 17 November 2004.

<sup>101</sup> FMG ASX Announcement 17 November 2004.

<sup>102</sup> FMG Presentation to Sydney Mining Club Luncheon 6 May 2005.

<sup>103</sup> FMG Quarterly Report for the period ending 31 March 2005.

<sup>104</sup> FMG Media Release 17 November 2004.

<sup>105</sup> FMG ASX Announcement 6 February 2005.

<sup>106</sup> FMG ASX Announcement 6 February 2005.

<sup>107</sup> FMG ASX Announcement 23 March 2005.

## White Knight

67. White Knight is an FMG tenement 60 km further west of Cloud Break, also closer to Port Hedland than Christmas Creek.<sup>109</sup> No resource has been announced at White Knight.

## RAIL

68. In 2003, FMG announced intentions to build an open-access port and rail system. The FMG rail system will "stretch down from Port Hedland, across the Chichester Ranges and out to two potential deposits owned by FMG. But most importantly, it would go near the more established Hope Downs deposit".<sup>110</sup>
69. As shown in **Attachment 2** to this Annexure, according to its PER's, FMG will construct a railway from Port Hedland to Mindy Mindy (part of Stage A), and a 160km spur line from the Stage A line to Mt Nicholas via Christmas Creek and Mt Lewin (part of Stage B of its PER).<sup>111</sup> FMG anticipated that Stage A would commence in the first half of 2005, with the first shipment of ore in the fourth quarter of 2006 or 2007. Construction of Stage B is scheduled to commence in the second half of 2005. In July 2004, FMG estimated the cost of its Pilbara railway at \$930 million.<sup>112</sup>
70. FMG has previously indicated, and is now obliged by the FMG/TPI State Agreement to ensure, that the FMG Line will be "open access" and multi-user.<sup>113</sup>
71. FMG's rail line will be capable of transporting 100 mtpa of iron ore.<sup>114</sup>
72. FMG has stated that the Hamersley Iron infrastructure is too far from FMG's resources to be an economic alternative.<sup>115</sup> (This statement may not apply to the Mindy Mindy deposit.)
73. Further, FMG has indicated that it does not expect both an FMG line and a Hope Downs line to be built – because of the cost and inefficiency that can be avoided by sharing.<sup>116</sup>

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<sup>108</sup> FMG ASX Announcement 23 March 2005.

<sup>109</sup> FMG ASX Announcement 15 March 2005.

<sup>110</sup> *The Australian*, "Twiggy's grand plan on track", 10 November 2003.

<sup>111</sup> PER Stage B dated 17 January 2005.

<sup>112</sup> FMG News Release 8 July 2004. By 9 July 2004 this estimate had been increased to \$970 million. Cf estimate at February 2004 for 50 mtpa: train sets A\$291m, below track A\$515m, total A\$806m (FMG Presentation to the Explorer Conference, Fremantle, 24-25 February 2004).

<sup>113</sup> FMG Media Release 23 August 2004; PER Stage A dated September 2004, p7.

<sup>114</sup> PER Stage A dated September 2004, p viii. Further, the FMG/TPI requires the FMG Line to have a capacity of not less than 70 mtpa.

<sup>115</sup> PER Stage A dated September 2004, p9.

<sup>116</sup> PER Stage A dated September 2004, p9.

## Stage A

74. As described above, the FMG PER's indicated that the infrastructure for the project would be constructed in two stages. According to the PER's, the North-South line (ie from Port Hedland to Mindy Mindy) will be part of Stage A. For much of its length, the proposed alignment of the North-South line will be between 2-3km from the exiting Mt Newman Line and the proposed Hope Downs alignment.<sup>117</sup> The Stage A railway is approximately 345km, and will also include various support infrastructure.<sup>118</sup> The facilities associated with the North-South railway will include rail loops, train marshalling yards, maintenance facilities, sidings, administration offices, warehouse, trip servicing facilities, substation and communication systems.<sup>119</sup> There will be a rail loop constructed at the port.<sup>120</sup>
75. FMG estimates that the construction of the Stage A railway will require up to 1000 personnel.<sup>121</sup>

## Stage B

76. The East-West component of the railway is part of the Stage B PER.<sup>122</sup> It will link the three prospective mining areas in the Chichester Ranges to the North South line via a 160km railway spur which will run along the slopes of the southern Chichester Ranges.<sup>123</sup> The railway infrastructure associated with this track will include sidings, passing bays and loading loops, train loader, rail maintenance track.<sup>124</sup>
77. FMG estimates 800 personnel will be required for the construction of the mines and infrastructure in Stage B.<sup>125</sup> Ongoing operation of the mines and infrastructure is estimated to involve 500 personnel.<sup>126</sup>

## Trains

78. According to its PER, FMG proposes that its trains could weigh up to 35,600t and be around 2.6km long comprising 3 locomotives and 200 ore cars.<sup>127</sup> Each ore car will contain

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<sup>117</sup> PER Stage A dated September 2004, p17.

<sup>118</sup> PER Stage A dated September 2004, p19.

<sup>119</sup> PER Stage A dated September 2004, p24.

<sup>120</sup> PER Stage A dated September 2004, figure 2. See p11-12 regarding location of loop and layout of the port facilities.

<sup>121</sup> PER Stage A dated September 2004, p20.

<sup>122</sup> PER Stage A dated September 2004, p3.

<sup>123</sup> PER Stage B dated 17 January 2005, p xi.

<sup>124</sup> PER Stage B dated 17 January 2005, p57.

<sup>125</sup> PER Stage B dated 17 January 2005, p57.

<sup>126</sup> PER Stage B dated 17 January 2005, p57.



126t of ore, will be similar to those used by BHPBIO and capable of going through a BHPBIO "twin cell dumper".<sup>128</sup>

79. The rail movements will be controlled remotely from a train operations control centre in Port Hedland.<sup>129</sup> At full capacity for FMG's project (45 mtpa), it is estimated that there will be 5.1 iron ore trains per day – however this will vary depending on demand by customers and use by third parties.<sup>130</sup>

## **PORT**

80. According to the FMG PER, the development of the FMG port facilities is part of Stage A of the Project.<sup>131</sup> The development of the port will involve a 2.5Mt capacity stockyard, various materials handling facilities, a single 750m wharf with parking berth, accommodating ships up to 250,000DWT, dredging (3.3Mm<sup>3</sup>), and various buildings.<sup>132</sup>
81. FMG estimates that the construction of the port will require up to 500 personnel.<sup>133</sup>
82. FMG's port facilities will be available to others under open access arrangements.<sup>134</sup>
83. FMG has indicated that it expects that each of FMG and Hope Downs will build their own port facilities due to expected demand.<sup>135</sup> Further, discussions with Hope Downs have indicated that a sharing agreement is not feasible.<sup>136</sup>
84. Port Hedland Port Authority is prepared to issue a lease to FMG over Anderson Point.<sup>137</sup>

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<sup>127</sup> PER Stage A dated September 2004, p24; PER Stage B dated 17 January 2005 p85. Note that minor adjustments have been made in the Stage B figures.

<sup>128</sup> PER Stage A dated September 2004, p24.

<sup>129</sup> PER Stage A dated September 2004, p24; PER Stage B dated 17 January 2005, p85. Note that in PER Stage A, FMG estimated 5.5 trains per day.

<sup>130</sup> PER Stage A dated September 2004, p24.

<sup>131</sup> PER Stage A dated September 2004, p3.

<sup>132</sup> PER Stage A dated September 2004, p19. See also p27-28 regarding port development including dredging. See p30-32 regarding other facilities at the port including stockpile management and ship loading.

<sup>133</sup> PER Stage A dated September 2004, p20.

<sup>134</sup> PER Stage A dated September 2004, p7.

<sup>135</sup> PER Stage A dated September 2004, p9.

<sup>136</sup> PER Stage A dated September 2004, p11.

<sup>137</sup> PER Stage A dated September 2004, p11. See also p18: discussions with PHPA to date indicate that it intends to offer an option to FMG to develop Anderson Point, which if taken up would lead to a lease over Anderson Point.

## TIMING

85. In its PER Stage A, FMG stated that, provided all approvals are in place, construction of the Stage A Project is due to commence in the first half of 2005, with the first shipment of ore in early 2007.<sup>138</sup> The estimated construction period of the Stage A Project is 20 months.<sup>139</sup> The project has an estimated life of 20 years.<sup>140</sup>
86. Construction of Stage B is scheduled to commence in the second half of 2005.<sup>141</sup>
87. In its PER Stage B, FMG states that it intends to mine Christmas Creek for the first 8 years of production, and then mine the other three mining areas (Mindy Mindy, Mt Lewin and Mt Nicholas) in combination for the following 12 years.<sup>142</sup>
88. FMG has estimated that Mindy Mindy will have a 6 year life.<sup>143</sup> By contrast, ConsMin announced in April 2005, that Mindy Mindy could produce 5 Mtpa over a 15 year life.<sup>144</sup> Although in July 2004 FMG claimed that a successful declaration application to the Council would "immediately advance the Mindy Mindy project and provide access to early cash flows",<sup>145</sup> the subsequent statements in the PER Stage B suggest that Mindy Mindy will now not be mined before 2015.<sup>146</sup>
89. In April 2005, FMG revised its timing targets, stating that production of iron ore by FMG is likely to commence in Q2 2007.<sup>147</sup>
90. In May 2005, FMG indicated that the rail construction will take 18 months, with parallel construction of the port (20 months).<sup>148</sup>

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<sup>138</sup> PER Stage B dated 17 January 2005 p xiv. Note that on p5 of the PER Stage B, shipment time is given as "the fourth quarter of 2006 or early in 2007".

<sup>139</sup> PER Stage A dated September 2004, p19.

<sup>140</sup> PER Stage A dated September 2004, p19. Note however, that at least one of FMG's sales contracts is for a 22 year term.

<sup>141</sup> PER Stage B dated 17 January 2005 p xiv.

<sup>142</sup> PER Stage B dated 17 January 2005, p74, 82.

<sup>143</sup> PER Stage B dated 17 January 2005, p83.

<sup>144</sup> News Release from ConsMin website dated 12 April 2005.

<sup>145</sup> FMG Quarterly Report for the period ending 30 June 2004.

<sup>146</sup> PER Stage B dated 17 January 2005, p74, 82. If Christmas Creek is mined for 8 years before Mindy Mindy, and production is estimated to commence in 2007, the earliest production would commence at Mindy Mindy is 2015.

<sup>147</sup> FMG ASX Announcement 27 April 2005 in response to queries from ASX.

<sup>148</sup> FMG Presentation to the Sydney Mining Club Luncheon 6 May 2005. Cf 22 months from financial close: FMG ASX Announcement 27 April 2005.

91. The Infrastructure Definitive Feasibility Study has been delayed and is expected to be complete by end June 2005.<sup>149</sup> The Mining Definitive Feasibility Study is expected to be completed by end September 2005.<sup>150</sup>

### **Production cost estimates**

92. In March 2005, FMG announced the following estimates: mining and processing costs of \$8.00/t, logistics cost of \$2.75/t, total cost of \$10.75/t and revenue of \$51.43/t.<sup>151</sup>
93. In 2003, FMG announced a cost estimate of \$1.2 billion for the project.<sup>152</sup>
94. In its PERs, FMG indicated that the total cost for construction of the rail, mine and port facilities (including the Stage A North-South railway and the Stage B East-West railway) was A\$1.85 billion.<sup>153</sup>
95. On 6 May 2005, FMG confirmed that the ultimate capital cost "would likely be a two billion plus number rather than the one billion plus figure provided for in the original 2003 cost estimate". Further, Mr Forrest stated that FMG will be working as hard as possible "to keep that cost at the lower end of two billion plus dollars to prevent a capital cost escalation toward a three billion plus figure".<sup>154</sup>

### **APPLICATION TO THE COUNCIL**

96. It appears that, subject to the proposal that the FMG rail facilities be combined with the existing BHPBIO rail facilities (see "Loop Proposal", below), FMG has applied for declaration of the Service for the purposes only of transporting iron ore from Mindy Mindy to Port Hedland. However, in statements made both before and after lodging its Application to the Council, FMG has indicated that it intends to build its own rail line from Port Hedland to Mindy Mindy.

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<sup>149</sup> FMG Quarterly Report for the period ending 31 March 2005.

<sup>150</sup> FMG Quarterly Report for the period ending 31 March 2005.

<sup>151</sup> FMG presentation to AJM Iron Ore & Steel Forecast Conference 2005 – March 2005. It is not clear whether the cost figures includes tax, royalties and administration. Cf FMG estimates as at 24 November 2004: mining and processing \$8.00/t, Logistics \$2.75/t, total cost \$10.75/t, revenue \$25.28/t; FMG Presentation to investors, sent to ASX 24 November 2004; FMG estimates as at 11 February 2005: costs unchanged, revenue \$35.99; FMG presentation.

<sup>152</sup> "Twiggy's grand plan on track", by David King, *The Australian*, 10 November 2003.

<sup>153</sup> FMG PER Stage A p201; FMG PER Stage B p8. Note that FMG had previously indicated (in 2003) that its rail and infrastructure project would cost A\$1.2billion, see Mining News report 2 February 2004.

<sup>154</sup> FMG ASX Announcement 6 May 2005; see also FMG ASX Announcement 27 April 2005 which confirmed that the A\$1.85 billion estimate announced in 2003 will be revised.

## The text of FMG's Application to the Council

97. In its application to the Council, FMG stated "if the Service is Declared, FMG will utilise access to the Service to operate trains and rolling stock to transport iron ore and iron ore products from Mindy Mindy to port facilities at Port Hedland".<sup>155</sup>

FMG went on to say:<sup>156</sup>

*"FMG requires access to the Service for the following reasons:*

- (1) *to transport its iron ore and iron ore products from Mindy Mindy and various other mine sites to the export facilities at Port Hedland ...*
- (2) *there is currently no rail alternative to transport iron ore from Mindy Mindy to Port Hedland for the type and volume of product planned by FMG; ...*
- (4) *to facilitate FMG's efforts to exploit other iron ore reserves [sic]<sup>157</sup> that might not in their own right justify the construction of rail infrastructure;*
- (5) *to increase the options available to FMG when determining the optimum method of transporting FMG's iron ore and iron ore products from Chicesters [sic] to Port Hedland; and*
- (6) *to further enable FMG to optimise the utilisation of its own rail infrastructure together with the Provider's rail infrastructure in a mutually advantageous way ... "*

## FMG has stated that its Application only relates to Mindy Mindy

98. When announcing its railway and port State Agreement, FMG stated:

*"It should be noted that the State Agreement deals with FMG's intended open access rail line from the Chichester Ranges to Port Hedland. This is to be contrasted with, and is entirely different from FMG's application to the National Competition Council under the Trade Practices Act, for "Declaration" of the access by FMG (and others) to the existing BHP Billiton rail line running from Port Hedland to Newman. The application relates to FMG's separate joint venture Mindy-Mindy deposit located some 80 kilometres to the south west of FMG's proposed mine sites in the eastern Chichester Ranges."<sup>158</sup>*

99. FMG has stated that its declaration application relates only to its "separate joint venture Mindy-Mindy deposit".<sup>159</sup> FMG has stated:<sup>160</sup>

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<sup>155</sup> FMG Application, para 7.1.

<sup>156</sup> FMG Application, para 7.3.

<sup>157</sup> FMG does not have any reserves, according to its announcements to date.

<sup>158</sup> FMG ASX Announcement 10 November 2004.

<sup>159</sup> FMG ASX Announcement 10 November 2004; FMG ASX Announcement 15 December 2004 (the declaration process "relates specifically to the Mindy Mindy joint venture project"); FMG ASX Announcement dated 11 January 2005. See also, FMG Quarterly Report for the period ending 31 December 2004: "As has previously been stated, the application relates only to FMG's joint venture deposit at Mindy Mindy which is quite separate to its wholly owned deposits along the Chichester Ranges, The ability or otherwise of FMG being able to access the BHPB Newman line is not critical to the main project involving mining in the Chichester Ranges and the development of rail and port

*"In response to media reports appearing over the weekend of 8 and 9 January 2005, Fortescue Metals Group Limited ("FMG") advises as follows:*

- The National Competition Council matter being appealed by BHP Billiton Iron Ore relates to rail access for the development of the FMG's small joint venture "Mindy Mindy" iron ore deposit in the Pilbara.*
- The Mindy Mindy deposit is separate to, and some distance from, FMG's wholly owned deposits within the Chichester Ranges for which FMG's planned mining operation will be serviced by its own rail line and port facilities which are the subject of the recently signed State Agreement which provides authority to operate the infrastructure together with certainty of land tenure for the same.*
- It is incorrect to suggest that the NCC matter (as detailed below) is vital to the main FMG iron ore development in the Chichester Ranges. The position was accurately reported in the Weekend Australian newspaper article where it was stated that **"for BHP the rail access issue is vital"** and for FMG, access to the Mt Newman railway line is to **"develop the small Mindy Mindy iron- ore deposit which is separate from Fortescue's main Chichester Range project for which it is planning to build its own railway line"**.*
- To summarise and to avoid any confusion, FMG confirms that a successful Declaration application is not required for the development and implementation of its integrated Chichester Range project which is progressing independently of the NCC process and being underpinned by the expanding iron ore resources defined within the Christmas Creek Area and Mt Nicholas deposits." (original emphasis)*

100. FMG has stated that Mindy Mindy is not of sufficient size to justify its own infrastructure, and stated that, consequently, "and, because of its proximity to the BHPB railway, the optimal economic solution for this otherwise stranded deposit is to access their rail lines".<sup>161</sup>

#### **FMG has stated that it will build a rail line to Mindy Mindy**

101. In September 2004, in its PER Stage A which proposes construction of the North South railway between Mindy Mindy and Port Hedland, FMG referred to its Application to the Council as follows:

*"In July 2004 [sic]<sup>162</sup> FMG lodged a request with the National Competition Council for the BHPBIO Mt Newman Line to be declared for use by other parties. If successful this declaration will allow the FMG to access the BHPBIO rail line. FMG believe that such rail access could be operated in a more efficient and sustainable manner, than operating independent closed access rail. The outcome of this declaration process will not be determined for some time. This process will not affect the FMG Environmental Approvals as:*

- FMG's proposed port and rail facilities (the subject of this PER) would still be required under this scenario;*

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infrastructure to export this production from Port Hedland. Regardless of the NCC outcome, FMG is still going to build its own railway line which in no way is contingent on the NCC declaration outcome."

<sup>160</sup> FMG ASX Announcement dated 11 January 2005.

<sup>161</sup> FMG Quarterly Report for the period ending 30 June 2004.

<sup>162</sup> FMG lodged its application with the Council in June 2004.

- *FMG still intend to develop mining operations and the associated rail spur (the subject of the Stage B PER, which is yet to be released)."*<sup>163</sup>

## **Loop proposal**

102. On 15 June 2004, FMG announced to the ASX that it had lodged its declaration application with the Council and stated that "once the BHPB lines are declared, FMG will seek to loop these lines with its own infrastructure and railway lines currently under development. The declaration of BHPB's lines will also immediately advance the Mindy Mindy project owned by FMG and Consolidated Minerals Ltd through the Pilbara Iron Ore Company Pty Ltd."<sup>164</sup>

This announcement explained FMG's statement is its Application to the Council that it required access to the Service:

*"(6) to further enable FMG to optimise the utilisation of its own rail infrastructure together with the Provider's rail infrastructure in a mutually advantageous way..."*

103. Also in mid-June 2004, Mr Forrest stated that if the Application to the Council were approved, "the looped railway system could increase the annual haulage capacity of the combined rail network to around 500 million tonnes per annum".<sup>165</sup>

104. In early September 2004, Mr Forrest confirmed that FMG is:

*"designing and implementing our own rail system .... but to ensure that .... infrastructure resources are optimised we have sought to declare the BHP line as well with an intent to join the line at the port and its commencement to create a loop therefore ... transform it into best practice infrastructure usage..."*<sup>166</sup>

105. The loop proposal was also confirmed in FMG's PER Stage A as set out above.

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<sup>163</sup> PER Stage A dated September 2004, p7.

<sup>164</sup> FMG ASX Announcement 15 June 2004.

<sup>165</sup> As reported in the Sydney Morning Herald "Fortescue tries to prise open access to Pilbara railway line", Mark Drummond, 16 June 2004.

<sup>166</sup> Media Teleconference – 6 September 2004 .

## ATTACHMENT 1

*FMG Funding: Forecast Sources and Uses* (Source FMG Presentation "A Bag of Rusty Nails" 3 March 2005)

### FMG Funding Forecast Sources and Uses



SOURCES	A\$m	USES	A\$m
China Metallurgical	* 306	Pre-production	70
Iron Ore Customers	**104	Beneficiation Plant	340
<b>Total</b>	<b>\$410</b>	<b>Total</b>	<b>\$410</b>

\* Under Agreement

\*\* Forecast Virtual Equity from Steel Mills

The New Force in Iron Ore

*The Pilbara Infrastructure Funding – Forecast and Uses* (Source FMG Presentation "A Bag of Rusty Nails" 3 March 2005)

### The Pilbara Infrastructure (TPI) Funding Forecast Sources and Uses

SOURCES	A\$m	USES	A\$m
China Rail	* 630	Train Sets	290
China Harbour	*571	Below Track	515
Iron Ore Customers	**139	Train Loading	165
Locomotive leases	100	Stock Yard Equipment	238
		Wharf	232
<b>Total</b>	<b>\$1,440</b>	<b>Total</b>	<b>\$1,440</b>

\* Under Agreement

\*\* Forecast Virtual Equity from Steel Mills

The New Force in Iron Ore

# ATTACHMENT 2

## Map of FMG proposed rail infrastructure



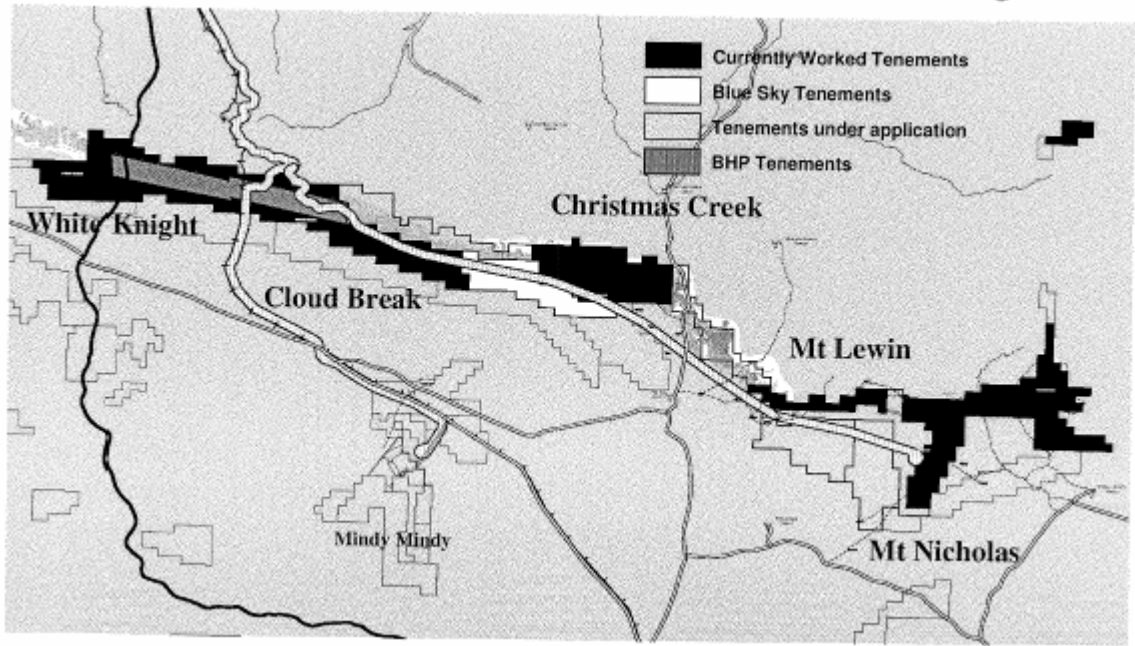
Source PER Figure 1



## Location of Deposits



Source: FMG Presentation to Sydney Mining Club Luncheon 5 May 2005



Source: FMG Presentation sent to ASX on 11 February 2005

### ATTACHMENT 3 - FMG Deposits

		Christmas Creek <sup>167</sup>	Cloud Break <sup>168</sup>	Mt Lewin/ The Hammer <sup>169</sup>	Mt Nicholas <sup>170</sup>
<b>Announced Resource (Mt)</b>	<i>Indicated</i>	587	*	*	*
	<i>Inferred</i>	558	391	200	390
	<b>Total</b>	<b>1,145</b>	<b>391</b>	<b>200</b>	<b>390</b>
<b>Fe (%)</b>	<i>Indicated</i>	58.4	*	*	*
	<i>Inferred</i>	57.8	58.4	56.5	49.5
	<b>Total</b>	<b>58.2</b>	<b>58.4</b>	<b>56.5</b>	<b>49.5</b>
<b>SiO<sub>2</sub> (%)</b>	<i>Indicated</i>	4.74	*	*	*
	<i>Inferred</i>	4.70	4.4	*	*
	<b>Total</b>	<b>4.72</b>	<b>4.4</b>	*	*
<b>Al<sub>2</sub>O<sub>3</sub> (%)</b>	<i>Indicated</i>	2.49	*	*	*
	<i>Inferred</i>	2.75	2.55	*	*
	<b>Total</b>	<b>2.62</b>	<b>2.55</b>	*	*
<b>P (%)</b>	<i>Indicated</i>	0.051	*	*	*
	<i>Inferred</i>	0.053	0.055	*	*
	<b>Total</b>	<b>0.052</b>	<b>0.055</b>	*	*
<b>LoI<sub>900</sub><sup>o</sup> C (%)</b>	<i>Indicated</i>	7.44	*	*	*
	<i>Inferred</i>	7.91	8.29	6.5	8
	<b>Total</b>	<b>7.67</b>	<b>8.29</b>	<b>6.5</b>	<b>8</b>

<sup>167</sup> Figures from FMG ASX Announcement, "Update of Christmas Creek Resource Statement", 2 June 2005.

<sup>168</sup> Figures from FMG Quarterly Report for the period ending 31 March 2005, released by FMG on 29 April 2005.  
 "\*\*" indicates no figure provided in this report.

<sup>169</sup> Figures from FMG's presentation to Sydney Mining Club Luncheon, 6 May 2005.  
 "\*\*" indicates no figure provided in this report.

<sup>170</sup> Figures from FMG's presentation to Sydney Mining Club Luncheon, 6 May 2005.  
 "\*\*" indicates no figure provided in this report.