



Statement No.

MINISTER FOR THE ENVIRONMENT; SCIENCE

000707

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

**PILBARA IRON ORE & INFRASTRUCTURE PROJECT:  
EAST-WEST RAILWAY & MINE SITES (STAGE B)**

**Proposal:** The proposal encompasses open pit iron ore mines at Christmas Creek and Mindy Mindy, a beneficiation plant at Christmas Creek, a borefield and an east-west railway to link the Stage A north-south railway to Port Hedland with the Christmas Creek minesite, as documented in schedule 1 of this statement.

**Proponent:** Fortescue Metals Group Limited

**Proponent Address:** 50 King's Park Road, WEST PERTH WA 6005

**Assessment Number:** 1520

**Report of the Environmental Protection Authority:** Bulletin 1202

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

**1 Implementation**

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

**2 Proponent Commitments**

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

Published on

16 DEC 2005

### **3 Proponent Nomination and Contact Details**

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

### **4 Commencement and Time Limit of Approval**

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

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

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

The application shall demonstrate that:

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

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

### **5 Compliance Audit and Performance Review**

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

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

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

5-2 The proponent shall submit a performance review report every five years after the start of operations, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, which addresses:

1. the major environmental issues associated with implementing the project; the environmental objectives for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those objectives;
2. the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best practical measures available;
3. significant improvements gained in environmental management, including the use of external peer reviews;
4. stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and
5. the proposed environmental objectives over the next five years, including improvements in technology and management processes.

## **6 Mulga and Other Flora and Communities**

6-1 Prior to commencement of ground-disturbing activities and in consultation with the Department of Conservation and Land Management, the proponent shall prepare a Mulga and Other Flora and Communities Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The objective of this Plan is to ensure the protection of vegetation values generally, including conservation of significant flora species and communities which occur within the vicinity of the mines and access corridor.

This Plan shall address:

1. the results of further targeted flora and vegetation surveys where surveys have not been completed or where the result of previous surveys cannot be extrapolated prior to ground-disturbing activities to provide further information on the conservation and baseline values status of each of the species and/or communities within the project area;
  2. the ongoing management, monitoring and reporting of impacts on vegetation communities, including Declared Rare Flora and Priority flora species, Mulga and restricted plant communities, within the project area;
  3. any regeneration or revegetation strategies which are required for species and/or communities referred to in item 1 above, including completion criteria to be met following the survey for species and/or communities impacted by the project;
  4. any management or mitigation actions required to address any failure to achieve regeneration completion criteria arising from item 3 above; and
  5. any further investigations into the regeneration and seed ecology of affected species or communities in order to determine appropriate regeneration methodologies, if completion criteria are not being achieved.
- 6-2 The proponent shall implement the Mulga and Other Flora and Communities Management Plan required by condition 6-1.
- 6-3 The proponent shall make the Mulga and Other Flora and Communities Management Plan required by condition 6-1 publicly available.

## **7 Fauna**

- 7-1 The proponent shall conduct fauna (including herpetofauna and non-marine molluscs) surveys prior to ground-disturbing activities, and if significant fauna are identified, shall not disturb the land surface until significant fauna have been relocated or otherwise appropriately protected in accordance with a Fauna Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

The objectives of this Plan are to:

- establish the potential direct and indirect impacts on fauna species, including threatened and Priority-listed species, within the project area, transport corridor and the adjacent Fortescue Marsh;
- establish management and monitoring strategies to minimise the potential impacts on fauna species; and

- establish appropriate review mechanisms regarding the strategies employed to minimise impacts on fauna species.

The Fauna Management Plan shall:

1. define the methodology to undertake further fauna surveys before the commencement of ground-disturbing activities;
  2. include follow-up surveys and delineation of significant fauna populations;
  3. include measures to control, and where possible, exclude feral animals;
  4. outline plans to minimise the effects of vegetation clearing, noise, vibration, light overspill and any other impacts on fauna;
  5. identify suitable relocation sites and relocation techniques or other means of ensuring the ongoing and appropriate protection for fauna species; and
  6. monitor and report the success of relocation or other agreed means of appropriate protection employed.
- 7-2 The proponent shall review and revise the Fauna Management Plan at intervals not exceeding five years, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.
- 7-3 The proponent shall implement the Fauna Management Plan required by condition 7-1.
- 7-4 The proponent shall make the Fauna Management Plan required by condition 7-1 publicly available.

## **8 Fortescue Marsh**

- 8-1 Prior to commencement of construction activities, the proponent shall prepare a Fortescue Marsh Management Plan, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

The objectives of this Plan are to:

- establish the baseline health condition of vegetation and fauna (including herpetofauna and non-marine molluscs) of the adjacent Fortescue Marsh prior to construction undertaken as part of this proposal;
- monitor and assess on an ongoing basis any changes in the health of the adjacent Fortescue Marsh attributable to the project following the commencement of construction; and

- implement appropriate actions, where necessary, to maintain the health of the adjacent Fortescue Marsh.

This Plan shall address the following:

1. the location of appropriate Fortescue Marsh potential impact monitoring sites and reference sites;
  2. a risk assessment of potential impacts of the development on the Fortescue Marsh, to include those areas of the Marsh most requiring protection from the development and the most likely threats to those areas;
  3. protocols and procedures for monitoring and quantitatively assessing the health of the Fortescue Marsh at all of the potential impact monitoring sites;
  4. calculations of statistical power of the monitoring procedures referred to in point 2 above to demonstrate that the procedures are appropriate to assess the extent of mortality against the 'threshold' and 'limit' levels;
  5. contingencies and remedial actions; and
  6. reporting requirements.
- 8-2 The proponent shall implement the Fortescue Marsh Management Plan required by condition 8-1.
- 8-3 The proponent shall make the Fortescue Marsh Management Plan required by condition 8-1 publicly available.

## **9 Borefield and Dewatering**

- 9-1 Prior to commencement of construction activities, the proponent shall prepare a Borefield and Dewatering Management Plan, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The objectives of this Plan are to:

- provide a framework to predict and measure impacts;
- protect and maintain the quality of the water in the aquifer;
- protect phreatophytic vegetation and any other groundwater-dependent ecosystems; and
- define appropriate environmental triggers for contingency plans.

This Plan shall address the following:

1. the layout and specifications of appropriate monitoring sites;

2. protocols and procedures for monitoring and quantitatively assessing the salinity and effects of water abstraction and dewatering on phreatophytic vegetation and any other groundwater-dependent ecosystems;
  3. threshold levels to be used to determine if and when action is to be taken to protect phreatophytic vegetation and any other groundwater-dependent ecosystems;
  4. the actions (including an immediate reduction in the rate of borewater abstraction from affected bores) which will be taken to address the increase in salinity or adverse effects if monitoring reveals that salinity in the production or monitoring wells is increasing and/or if abstraction is affecting phreatophytic vegetation and any other groundwater-dependent ecosystems;
  5. contingency plans for an alternative source if insufficient water is available from this borefield at sustainable levels of abstraction to meet demand;
  6. reporting requirements; and
  7. closure procedures.
- 9-2 The proponent shall implement the Borefield and Dewatering Management Plan required by condition 9-1.
- 9-3 The proponent shall make the Borefield and Dewatering Management Plan required by condition 9-1 publicly available.

## **10 Subterranean Fauna**

- 10-1 Within six months following the formal authority issued to the decision-making authorities under section 45(7) of the *Environmental Protection Act 1986*, the proponent shall commence surveys for subterranean fauna in accordance with a Subterranean Fauna Survey Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

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

1. survey areas likely to be affected by project operations; and
  2. survey areas with similar habitats outside the areas to be affected by project operations to establish the conservation significance of fauna within the areas to be affected.
- 10-2 The proponent shall review and revise the Subterranean Fauna Survey Plan at intervals not exceeding five years, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

- 10-3 In the event that the results of the surveys required by condition 10-1 indicate that there is a risk of loss of subterranean species or communities as a result of project operations, the proponent shall institute management measures in accordance with a Subterranean Fauna Management Plan prepared to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

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

1. avoid and/or manage impacts on subterranean fauna species and/or communities and their habitats where the long-term survival of those species and/or communities may be at risk as a result of project operations;
  2. monitor the distribution and abundance of species and/or communities of subterranean fauna, groundwater levels, groundwater quality and other relevant aspects of subterranean fauna habitat to ensure that the long-term survival of subterranean fauna species and communities is not compromised as a result of project operations; and
  3. take timely remedial action in the event that monitoring indicates that project operations may compromise the long-term survival of subterranean fauna and/or communities.
- 10-4 Prior to the commencement of dewatering activities for the project, the proponent shall, if applicable, implement the Subterranean Fauna Management Plan required by condition 10-3.
- 10-5 The proponent shall make the Subterranean Fauna Management Plan required by condition 10-3 publicly available.

## **11 Surface Water**

- 11-1 Prior to ground-disturbing activity relating to the transport corridor and mine activities, the proponent shall prepare a detailed Surface Water Management Plan to the requirements of the Minister for the Environment on advice of the Department of Conservation and Land Management and the Water and Rivers Commission.

The objective of this plan is to minimise direct and indirect impacts (such as by modified surface drainage, saline water application) on flora, fauna and vegetation.

This Plan shall detail:

1. the alignment of the transport corridor and the components within it;
2. locations of infrastructure and resources (eg roads, conveyors, borrow pits, groundwater bores, communications facilities);
3. the design considerations and management measures used for borrow pits;



4. the specifications and locations of altered surface drainage mitigation measures such as levées and spreader ditches; and
  5. any ongoing monitoring and management measures adopted to minimise the impacts described above.
- 11-2 The proponent shall review and revise the Surface Water Management Plan at intervals not exceeding five years, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Water and Rivers Commission and the Department of Conservation and Land Management.
- 11-3 The proponent shall implement the Surface Water Management Plan required by condition 11-1.
- 11-4 The proponent shall make the Surface Water Management Plan required by condition 11-1 publicly available.

## **12 Rail Route**

- 12-1 Prior to commencement of construction of the rail formation, the proponent shall prepare a Rail Route Environmental Management Plan to minimise adverse environmental impacts of the railway and its formation, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management.

This Plan shall include:

1. the results of detailed vegetation and fauna survey(s);
2. detailed rail and road survey information;
3. a statement that the *Aboriginal Heritage Act 1972* has been complied with prior to construction;
4. the railway and its formation, in particular drainage shadow impacts;
5. location, ongoing monitoring and maintenance of culverts and effects of redistributed surface water runoff after significant rain events on Mulga woodland vegetation downstream;
6. contingency measures to ensure that affected Mulga trees downslope are protected;
7. ongoing measures for weed hygiene and management; and
8. consideration of final closure strategies for the railway at the end of mining.

- 12-2 The proponent shall review and revise the Rail Route Environmental Management Plan at intervals not exceeding five years, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Water and Rivers Commission and the Department of Conservation and Land Management.
- 12-3 The proponent shall implement the Rail Route Environmental Management Plan required by 12-1.
- 12-4 The proponent shall make the Rail Route Environmental Management Plan required by condition 12-1 publicly available.
- 12-5 The proponent shall construct the railway where it traverses Mulga vegetation types having regard for condition 12-1.
- 12-6 The proponent shall not disturb Mulga vegetation for the sole purpose of borrow pits.

Note: There will be Mulga disturbance associated with the project, but this will be carefully considered in accordance with the requirements of these conditions.

- 12-7 Subsequent owners and/or users of the railway shall be required to accept responsibility for the maintenance of culverts and water spreader structures to ensure that downslope Mulga vegetation is not impacted.

Note: The design and demonstration of environmental acceptability of the route are to meet the requirements of the Minister for the Environment on advice of the Environmental Protection Authority and the Department of Conservation and Land Management. This will entail detailed documentation by the proponent to enable on-site field inspections of each drainage crossing.

### **13 Decommissioning and Final Rehabilitation**

- 13-1 The proponent shall rehabilitate and decommission the project areas in accordance with the Conceptual Closure Plan in the Public Environmental Review (Appendix Q FMG, 2005), or subsequent revisions of the Plan (the Life-of-Mine Closure Plan), to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Water and Rivers Commission, the Department of Industry and Resources and the Department of Conservation and Land Management.
- 13-2 The proponent shall review and revise the Life-of-Mine Closure Plan at intervals not exceeding five years, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, the Water and Rivers Commission, the Department of Industry and Resources and the Department of Conservation and Land Management.

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

Each revision of the Life-of-Mine Closure Plan shall set out procedures and measures to:

1. manage over the long-term ground and surface water systems affected by the open pits and waste rock dumps;
2. rehabilitate all disturbed mine and infrastructure corridor areas to a standard suitable for the agreed end land use(s), with local flora species appropriate for the area;
3. backfill the pits to minimise impacts on groundwater quality, subterranean fauna and surface drainage patterns, and to encourage appropriate revegetation;
4. identify contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities; and
5. develop management strategies and/or contingency measures in the event that operational experience and/or monitoring indicate that a closure objective is unlikely to be achieved.

13-3 The proponent shall make revisions of the Life-of-Mine Closure Plan required by condition 13-2 publicly available.

## Procedures

1. Where a condition states “to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority”, the Environmental Protection Authority will provide that advice to the Department of Environment for the preparation of written notice to the proponent.
2. The Environmental Protection Authority may seek advice from other agencies or organisations, as required, in order to provide its advice to the Department of Environment.
3. Where a condition lists advisory bodies, it is expected that the proponent will obtain the advice of those listed as part of its compliance reporting to the Department of Environment.
4. The Minister administering the intended *Iron Ore (FMG Chichester Pty Ltd) Agreement* will establish a formal review mechanism to ensure that a bond is placed on the proponent at the appropriate time to facilitate completion of environmental programs.

## Notes

1. The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environment over the fulfilment of the requirements of the conditions.
2. The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the *Environmental Protection Act 1986*.
3. Within this statement, to “have in place” means to “prepare, document, implement and maintain for the duration of the proposal”.
4. Compliance and performance reporting will endeavour to be in accord with the timing requirements of the intended *Iron Ore (FMG Chichester Pty Ltd) Agreement Act*.

Dr Judy Edwards MLA  
MINISTER FOR THE ENVIRONMENT; SCIENCE

16 DEC 2005

## The Proposal (Assessment No. 1520)

The proposal (See location figures 1 and 2) comprises:

- mines at Christmas Creek and Mindy Mindy;
- a beneficiation plant at Christmas Creek;
- a borefield for water supply;
- an east-west railway corridor to link Christmas Creek mine with the Stage A north-south railway to Port Hedland; and
- an accommodation village.

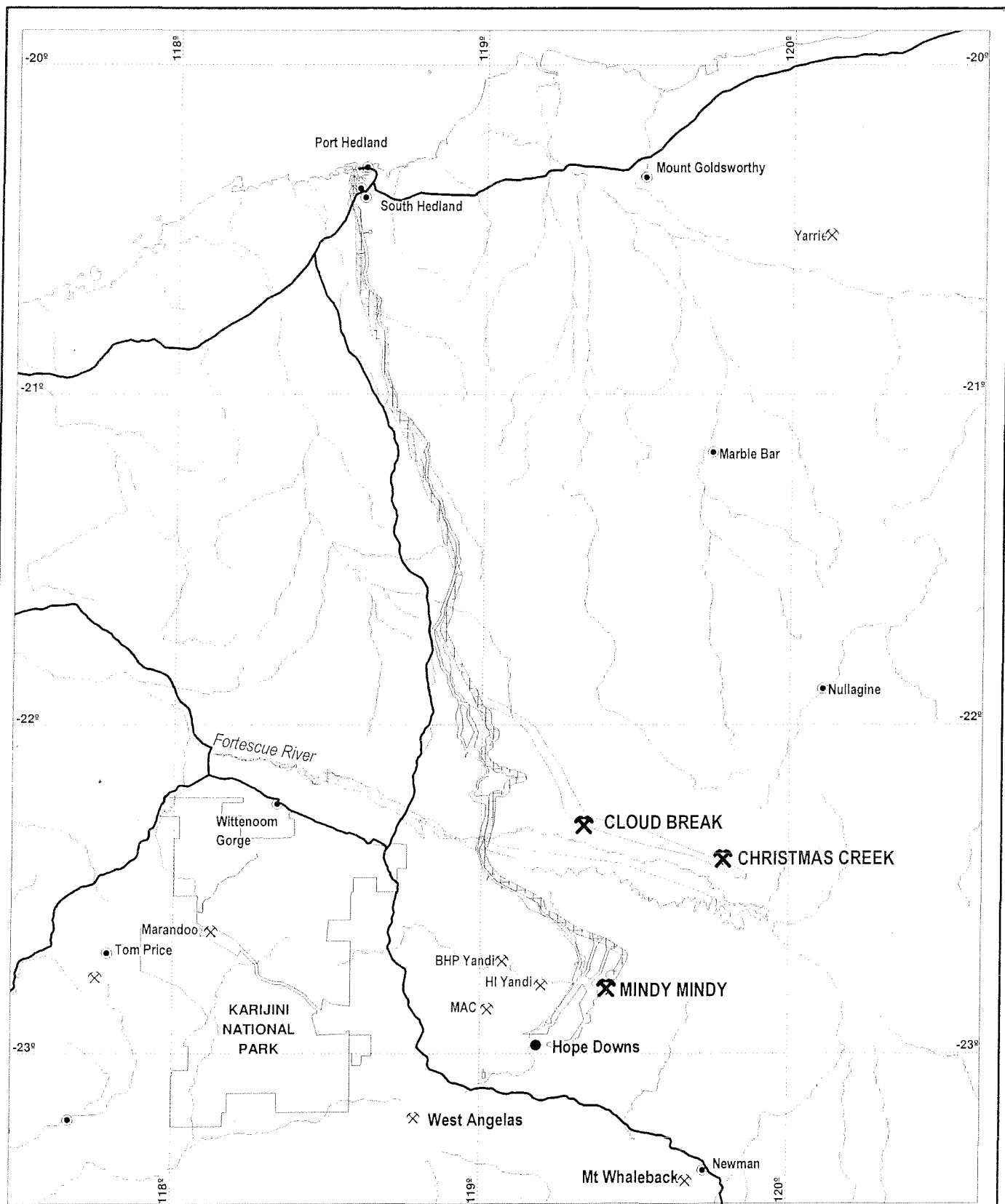
**Table 1 – Key Proposal Characteristics**

Element	Description
Location	Mines at Mindy Mindy (approximately 70 kilometres north of Newman), Christmas Creek (approximately 100 kilometres north of Newman).
Main activities	Iron ore strip mining, pit backfilling, ore crushing, beneficiation (at Christmas Creek), mine rehabilitation and closure.
Resource	Mindy Mindy: 68 million tonne channel iron deposit, 40 metres average pit depth; Christmas Creek: 1000 million tonne Marra Mamba ore, 60 metres average pit depth.
Rate of production	Combined 45 million tonnes per annum.
Contingent activities	Pit dewatering, ore transport by 111 kilometres east-west rail link to approved north-south railway to Port Hedland for export.
Areas disturbed	852 hectares - Mindy Mindy; 10123 hectares - Christmas Creek; 1600 hectares – railway.
Duration	20+ years
Employment	800 personnel for construction on-site; 500 personnel divided between on-site and local towns (mainly Newman) for the operational stage.
Water requirements	11.4 Gigalitres per annum or 31.2 megalitres per day from borefield to be developed.
Power supply	Not a part of this proposal.

## Figures (attached)

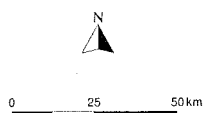
Figure 1 – Regional location map

Figure 2 – Project area map



### Legend

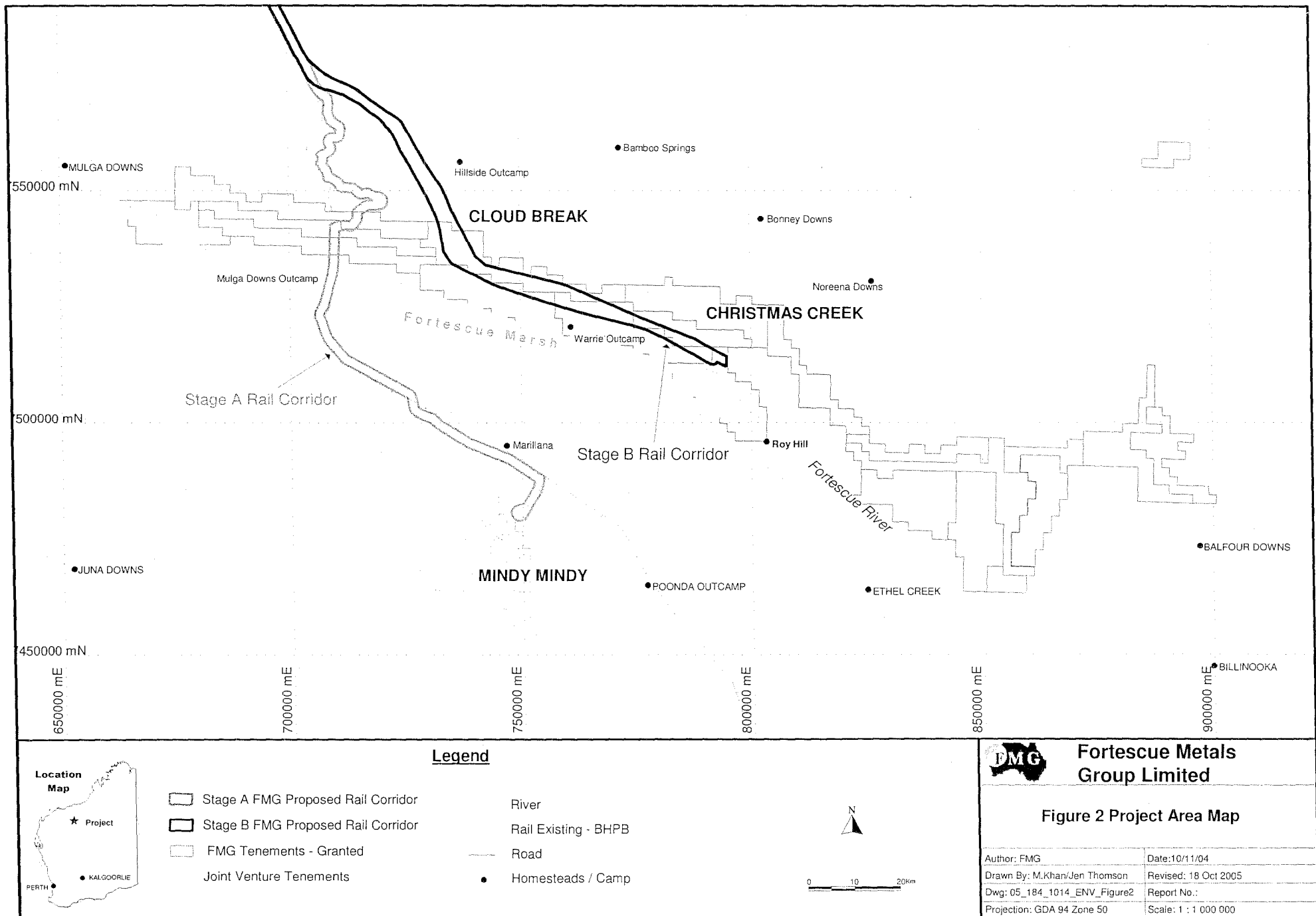
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|--|-----------------------------|--|----------------------------------|
|  | Town                        |  | Rail - proposed FMG Stage B      |
|  | Highway                     |  | Rail - Hope Downs Rail Corridor  |
|  | Drainage                    |  | Iron Ore deposit                 |
|  | Subject to inundation       |  | Iron Ore mine                    |
|  | Rail - existing             |  | Proposed FMG mine site (Stage B) |
|  | Rail - proposed FMG Stage A |  |                                  |



**Fortescue Metals  
Group Limited**

### Figure 1 Regional Location Map

Author: FMG	Date: August 2004
Drawn: M.Khan/Jen Thomson	Revised: 14 Oct 2005
Dwg No.: 05_184_1014_ENV_Figure1	Report No.:
Projection: GDA94 Zone 50	Scale: 1 : 1,700,000



**Fortescue Metals  
Group Limited**

**Figure 2 Project Area Map**

Author: FMG	Date: 10/11/04
Drawn By: M.Khan/Jen Thomson	Revised: 18 Oct 2005
Dwg: 05_184_1014_ENV_Figure2	Report No.:
Projection: GDA 94 Zone 50	Scale: 1 : 1 000 000

**Proponent's Environmental Management Commitments**

December 2005

**PILBARA IRON ORE & INFRASTRUCTURE  
PROJECT:  
EAST-WEST RAILWAY  
&  
MINE SITES (STAGE B)**

(Assessment No. 1520)

**FORTESCUE METALS GROUP LIMITED**





No.	Topic	Objective	Action	Timing	Advice from
3	Water usage	To ensure that water conservation measures are implemented.	<ol style="list-style-type: none"> <li>1. Develop a Water Management Plan to investigate ways to minimise water use, including water recycling and use of alternative dust suppression measures such as: <ol style="list-style-type: none"> <li>1) enclosing/covering equipment where possible;</li> <li>2) sealing roads and high traffic areas;</li> <li>3) management of stockpiles;</li> <li>4) harvesting of water at the minesite to supplement supplies; and</li> <li>5) planting shelter belts.</li> </ol> </li> <li>2. Implement the Water Management Plan.</li> </ol>	<p>Prior to construction.</p> <p>During construction and operations.</p>	WRC
4	Fire Management Plan	Reduce the risk of unplanned fires and provide contingency measures to minimise any impacts in the event that a fire is started.	<ol style="list-style-type: none"> <li>1. Prepare a Fire Management Plan to include: <ol style="list-style-type: none"> <li>1) installation of necessary fire breaks;</li> <li>2) safe work procedures for all welding and grinding work;</li> <li>3) personal fire hazard procedures;</li> <li>4) vehicle fire hazard procedures;</li> <li>5) emergency fire response procedures; and</li> <li>6) bushfire contingency plans.</li> </ol> </li> <li>2. Implement the approved Fire Management Plan.</li> </ol>	<p>Prior to construction.</p> <p>During construction and operations.</p>	<p>CALM FESA</p> <p>CALM FESA</p>
5	Noise Management Strategy	Ensure noise levels comply with statutory requirements and acceptable (and appropriate) standards.	<ol style="list-style-type: none"> <li>1. Prepare a Construction Noise and Vibration Management Plan.</li> <li>2. Implement the Construction Noise and Vibration Management Plan.</li> <li>3. Prepare an Operational Noise and Vibration Management Plan for the mines which: <ol style="list-style-type: none"> <li>1) identifies noise reduction strategies;</li> <li>2) minimises disturbance to the Fortescue Marsh and residence(s) from blasting noise generated at operations;</li> <li>3) outlines monitoring program to measure noise emissions and assess optimal placing of noise barriers.</li> </ol> </li> <li>4. Implement the Operational Noise and Vibration Management Plan.</li> </ol>	<p>Prior to and during construction.</p> <p>Prior to commissioning and during operations.</p> <p>During operations.</p>	<p>DoIR</p> <p>DoIR</p>

No.	Topic	Objective	Action	Timing	Advice from
6	Aboriginal Heritage	Ensure the proposal complies with requirements of the <i>Aboriginal Heritage Act 1972</i> and that changes to the biological and physical environment resulting from the Project do not adversely affect cultural associations with the area.	<ol style="list-style-type: none"> <li>1. Complete ethnographic and archaeological surveys of the proposed minesites, village and railway corridor.</li> <li>2. Develop a Cultural Heritage Management Plan for the Project in consultation with the Aboriginal Traditional Owners.</li> <li>3. Implement the Cultural Heritage Management Plan in consultation with the Aboriginal Traditional Owners.</li> </ol>	<p>Prior to the start of construction.</p> <p>During the design phase.</p> <p>During construction, operations and decommissioning.</p>	<p>DIA PNTS</p> <p>DIA PNTS</p> <p>DIA PNTS</p>
7	Weed Hygiene and Management Plan	Maintain the abundance, species diversity, geographic distribution and productivity of vegetation communities.	<ol style="list-style-type: none"> <li>1. Prepare a Weed Hygiene and Management Plan which contains procedures to minimise the introduction and spread of weeds, including: <ol style="list-style-type: none"> <li>1) identifying target weeds;</li> <li>2) hygiene inspection and washdown procedures for all mobile plant and equipment;</li> <li>3) control measures which may be necessary for some species;</li> <li>4) monitoring and any follow-up control, including reporting to relevant authorities; and</li> <li>5) wash down facilities.</li> </ol> </li> <li>2. Implement the approved Weed Hygiene and Management Plan.</li> </ol>	<p>Prior to construction.</p> <p>During construction, operations, and decommissioning.</p>	<p>CALM APB</p> <p>CALM APB</p>

No.	Topic	Objective	Action	Timing	Advice from
8	Hydrocarbon Management / Oilspill Contingency Plan	To maintain or improve the quality of surface and groundwater, to ensure that existing and potential uses, including ecosystem maintenance is protected.	<ol style="list-style-type: none"> <li>1. Have in place and make publicly available, a Hydrocarbon Management Plan / Oil Spill Contingency Plan for the mine addressing: <ol style="list-style-type: none"> <li>1) Spill prevention;</li> <li>2) Identification of the level of risk posed from contamination by hydrocarbons in the area of operations which includes; <ol style="list-style-type: none"> <li>(a) identification of sensitive areas and measures to protect them;</li> <li>(b) likely types and volumes of hydrocarbons.</li> </ol> </li> <li>3) Appropriate procedures to allow rapid assessment of a spill and the mobilisation of response;</li> <li>4) Appropriate procedures to control fuel handling and contamination;</li> <li>5) Appropriate clean up procedures on site according to the level of risk proposed;</li> <li>6) A first strike response capability maintained in the event of a spill, which includes the following: <ol style="list-style-type: none"> <li>(a) equipment appropriate to the level of risk;</li> <li>(b) on-site personnel trained in spill response and management.</li> <li>(c) Appropriate on-site arrangements for the disposal of oily waste;</li> <li>(d) Systems in place to monitor and report spills;</li> <li>(e) Systems to continually monitor and reduce contamination.</li> </ol> </li> </ol> </li> <li>2. Implement the Hydrocarbon Management Plan / Oil Spill Contingency Plan.</li> </ol>	<p>Prior to construction</p> <p>When required.</p>	<p>DPI</p> <p>FESA</p> <p>DOCEP</p>
9	Acid Mine Drainage	<p>Minimise the risk to the environment resulting from potentially acid-forming materials.</p> <p>Avoid disturbance of potentially acid-generating materials during construction and mining.</p>	<ol style="list-style-type: none"> <li>1. Complete sampling and analysis of materials potentially exposed during mining.</li> <li>2. Design and implement mining schedule to avoid where practicable potentially acid-generating material, or manage the material to minimise potential acid generation.</li> </ol>	<p>Prior to start of mining.</p> <p>During construction, operations and mine closure.</p>	<p>DoIR</p> <p>DoIR</p>

No.	Topic	Objective	Action	Timing	Advice from
10	Greenhouse Gases Management	To minimise greenhouse gas emissions for the Project and reduce emissions per unit product to as low as reasonably practicable, and mitigate greenhouse gas emissions in accordance with the <i>Framework Convention on Climate Change 1992</i> , and with established Commonwealth and State policies.	<ol style="list-style-type: none"> <li>1. Develop a Greenhouse Gas Management Plan which addresses efficient use of resources and equipment and other measures to reduce greenhouse gas emissions.</li> <li>2. Implement the Greenhouse Gas Management Plan.</li> </ol>	<p>Prior to construction</p> <p>During operations</p>	
11	Stakeholder Consultation Strategy	To ensure continuation of consultation with stakeholders, and that outcomes are incorporated into the management of the proposal.	<ol style="list-style-type: none"> <li>1. Prepare a Stakeholder Consultation Strategy which includes: <ol style="list-style-type: none"> <li>1. Identification of relevant stakeholders including; but not limited to, community groups, Aboriginal groups, environmental groups, local government and government agencies;</li> <li>2. Outline opportunities to discuss the management plans, monitoring programmes and studies with stakeholders; and</li> <li>3. Report on environmental performance.</li> </ol> </li> <li>2. Implement the Stakeholder Consultation Strategy.</li> </ol>	Prior to construction	
12	Surface Water	To ensure that surface water flows are maintained downstream of operations of the proposal.	Undertake trials to determine the potential for increased infiltration of water following the rehabilitation of mining areas.	During construction and operations	CALM DoIR
13	Fortescue Marshes	To ensure that the risk to the Fortescue Marsh is minimised.	Conduct further studies into the hydrology of the Fortescue Marshes.	During operations	CALM
14	Offsets	To mitigate environmental impacts of the proposal.	Participate in preparation of plans, programmes and research to improve knowledge of the local ecosystem and assist in the management of key environmental attributes within the local area as per Attachment A.	Prior to and during operations	CALM

#### KEY

APB Agriculture Protection Board  
 CALM Department of Conservation and Land Management  
 DIA Department of Indigenous Affairs  
 PNTS Pilbara Native Title Service

DOCEP Department of Consumer and Employment Protection  
 DOIR Department of Industry and Resources  
 FESA Fire and Emergency Services Authority  
 WRC Water and Rivers Commission

## Proponent's Environmental Offsets

PILBARA IRON ORE & INFRASTRUCTURE PROJECT: EAST-WEST RAILWAY & MINE  
SITES (STAGE B)  
(Assessment No. 1520)

1.	Fund detailed research programs into Mulga or other poorly know taxa including: <ul style="list-style-type: none"> <li>• Three PhD research projects or equivalent to be run consecutively for a period of nine years;</li> <li>• Three Honours projects or equivalent to be run consecutively for a period of three to six years.</li> </ul>
2.	Fund detailed research programs into a relevant Threatened Fauna Species: <ul style="list-style-type: none"> <li>• One PhD research project or equivalent to be run for a period of three years.</li> </ul>
3.	Fund research into Mulga – Water Relationships for a period of five years.
4.	Fund a position within CALM to manage project implementation and operations over the life of the project.
5.	Weed Management Extension Program to improve the existing environment outside the project area.
6.	Fund the development of a statutory Fortescue Marshes Management Plan.
7.	A Memorandum of Understanding to be developed between CALM and the proponent to develop and maintain good working relationships between both organisations.

## Attachment – Change to Proposal (Statement 707).

Proposal: PILBARA IRON ORE & INFRASTRUCTURE PROJECT, STAGE B.

Proponent: Fortescue Metals Group Limited

Change: in Schedule 1, Table 1: Key Proposal Characteristics (Assessment no. 1520).

### Features of original Proposal

Element	Description
Area Disturbed	10,123 hectares – Christmas Creek

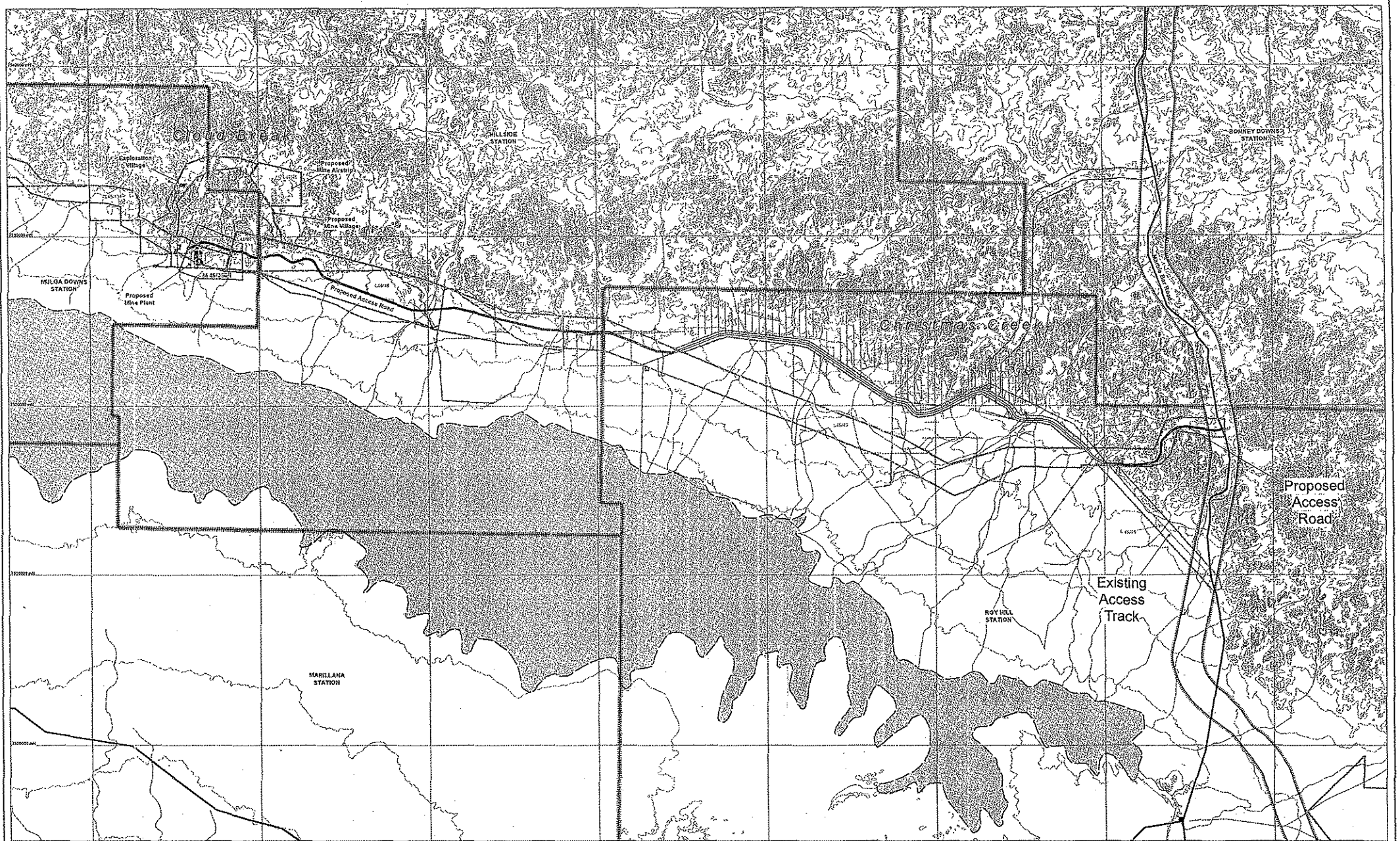
### Features of changed Proposal

Element	Description
Area Disturbed	10,135.5 hectares – Christmas Creek

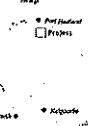
### ADDITIONAL FIGURE (ATTACHED):

Figure 3: Cloud Break Mine Access Road

Date of Approval: 31/10/06



#### Location Map



#### LEGEND

- FMG Miscellaneous Licence
- FMG Proposed Access Road
- FMG Proposed Access Road using Existing Road
- FMG Mining Lease M46055
- 10m Contours
- Existing Roads
- Existing Tracks

- Portacore Marsh
- Drainage



**Fortescue Metals Group Ltd**

#### Cloud Break Proposed Access Requirements Figure 3

Author: A Perkins	Date: 17/8/2004
Drawn By: Jane Thomson	Revised: 03/02/2005
Drawn No: 06_215_1005_000001	Report No:
Scale: 1:100000	Projection: UTM Zone 50 (GDA 94)



## Attachment 2 to Statement 707

### Change to Proposal

- Proposal:** The proposal encompasses open pit iron ore mines at Christmas Creek and Mindy Mindy, a beneficiation plant at Christmas Creek, a borefield and an east-west railway to link the Stage A north-south railway to Port Hedland with the Christmas Creek minesite.
- Proponent:** Fortescue Metals Group Ltd
- Changes:** Re-alignment of the rail, increase in the Proposed Rail Corridor (or Rail Investigation Area) and increase in rail length from 111 kilometres (km) to 119 km as shown in attached Figure 3

#### Amendment of Schedule 1 – Key Proposal Characteristics

##### Features of previous approved Proposal

Element	Quantities/Description
Contingent Activities	Pit dewatering, ore transport by 111 kilometres east-west rail link to approved north-south railway to Port Hedland for export.

##### Features of changed Proposal

Element	
Contingent Activities	Pit dewatering, ore transport by 119 kilometres east-west rail link to approved north-south railway to Port Hedland for export

##### Figure Attached

Figure 3: Rail Investigation Corridor and approximate rail alignment

Approved under delegation  
from Minister for the Environment:

Approval Date: 3.10.08

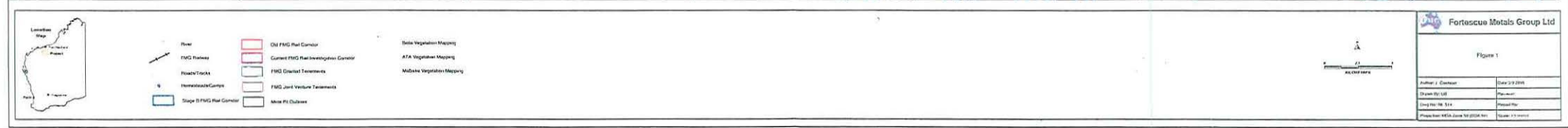
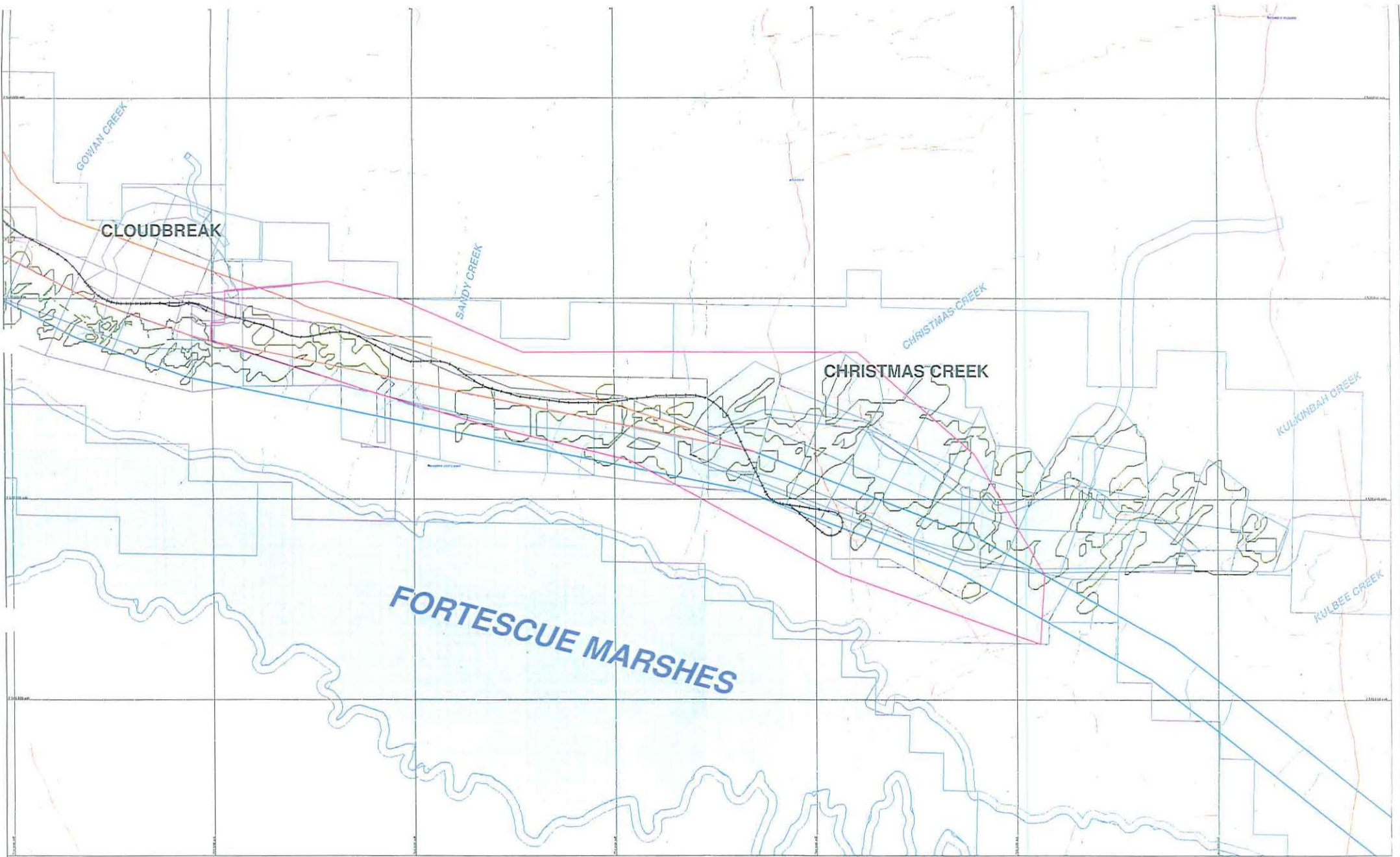


Figure 3 Rail Investigation Corridor and approximate rail alignment

## Attachment 3 to Statement 707

### Change to Proposal

---

**Proposal:** Pilbara Iron Ore and Infrastructure Project: East-West Railway and Mine Sites (Stage B)

**Proponent:** Fortescue Metals Group Ltd (FMG)

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**Change:** Transport iron ore by truck from Christmas Creek mine site to Cloud Break mine site along the existing rail access road and the existing Christmas Creek access road in addition to the approved east-west railway to Port Hedland for export.

#### Key Characteristics Table:

Element	Description of approved proposal	Description of approved changes to proposal (bolded)
Duration	20+ years	20+ years
Location	Mines at Mindy Mindy (approximately 70 kilometres north of Newman), Christmas Creek (approximately 100 kilometres north of Newman).	Mines at Mindy Mindy (approximately 70 kilometres north of Newman), Christmas Creek (approximately 100 kilometres north of Newman).
Main activities	Iron ore strip mining, pit backfilling, ore crushing, beneficiation (at Christmas Creek), mine rehabilitation and closure.	Iron ore strip mining, pit backfilling, ore crushing, beneficiation (at Christmas Creek), mine rehabilitation and closure.
Resource	Mindy Mindy: 68 million tonne channel iron deposit, 40 metres average pit depth; Christmas Creek: 1,000 million tonne Marra Mamba ore, 60 metres average pit depth.	Mindy Mindy: 68 million tonne channel iron deposit, 40 metres average pit depth; Christmas Creek: 1,000 million tonne Marra Mamba ore, 60 metres average pit depth.
Rate of production	Combined 45 million tonnes per annum.	Combined 45 million tonnes per annum.
Contingent activities	Pit dewatering, ore transport by 119 kilometres east-west rail link to approved north-south railway to Port Hedland for export.	Pit dewatering, ore transport by 119 kilometres east-west rail link to approved north-south railway to Port Hedland for export or via road to Cloud Break for transport to Port Hedland for export.



Element	Description of approved proposal	Description of approved changes to proposal (bolded)
Areas disturbed	852 hectares-Mindy Mindy; 10,135.5 hectares-Christmas Creek; 1,600 hectares-railway.	852 hectares-Mindy Mindy; 10,135.5 hectares-Christmas Creek; 1,600 hectares-railway.
Employment	800 personnel for construction on-site; 500 personnel divided between on-site and local towns mainly Newman) for the operational stage.	800 personnel for construction on-site; 500 personnel divided between on-site and local towns (mainly Newman) for the operational stage.
Water requirements	11.4 Gigalitres per annum / 31.2 megalitres per day from borefield to be developed.	11.4 gigalitres per annum or 31.2 megalitres per day from borefield to be developed.
Power supply	Not a part of this proposal. Will be a separate referral.	<b>Removed from table</b>

#### List of Figures:

*Figure 5: Haul road along existing access roads between Christmas Creek and Cloud Break*

**Dr Paul Vogel**

CHAIRMAN

Environmental Protection Authority  
under delegated authority

Approval date: 23-6-09

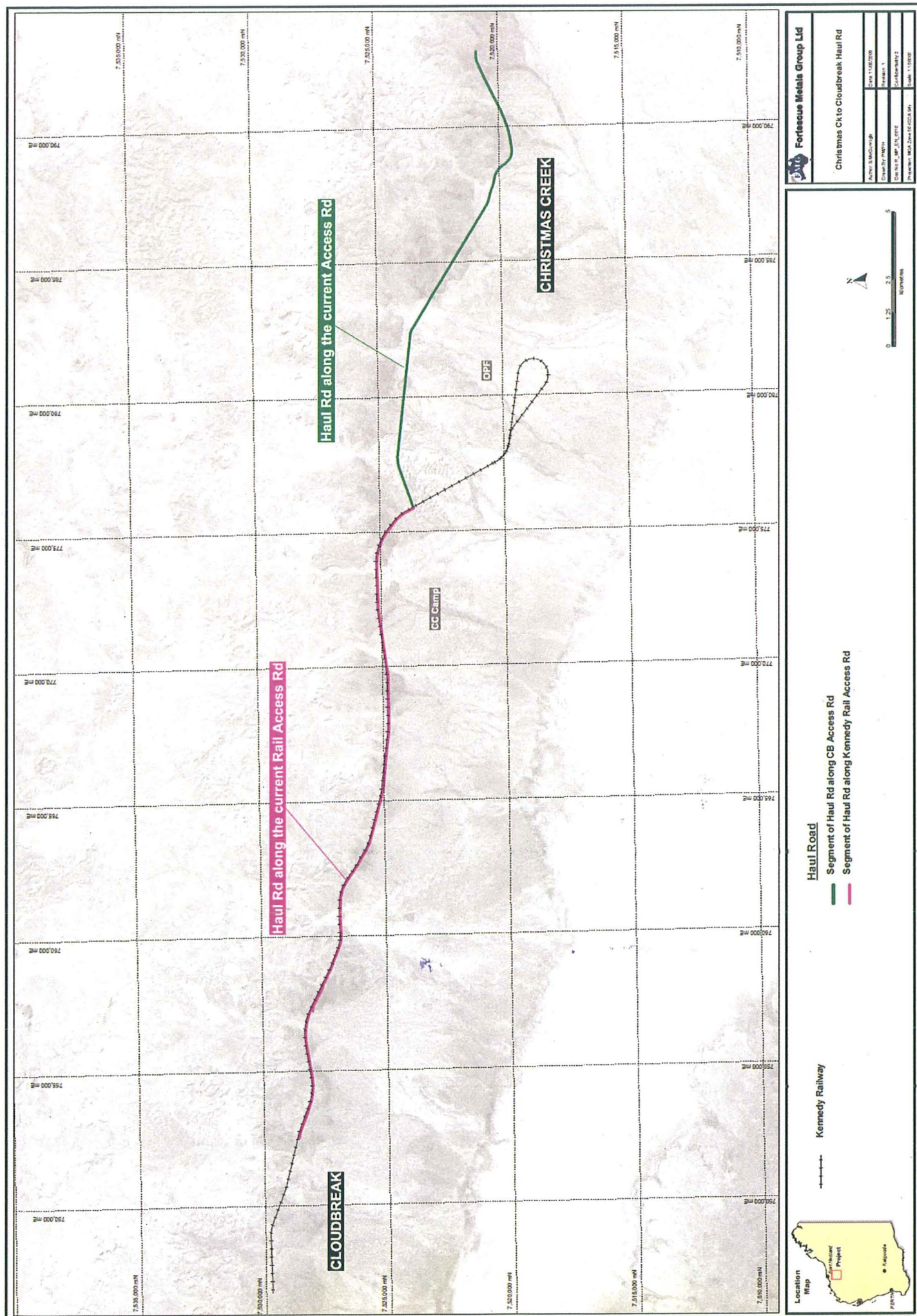


Figure 5: Haul road along existing access roads between Christmas Creek and Cloud Break

## Attachment 4 to Statement 707

### Change to Proposal

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**Proposal:** Pilbara Iron Ore & Infrastructure Project: East-West Railway & Mine Sites (Stage B)

**Proponent:** Fortescue Metals Group Limited

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**Change:** Construction of additional rail infrastructure for sections of rail duplication, with associated additional 102 hectares of disturbance in the railway corridor.

#### Key Characteristics Table:

Element	Description of proposal	Description of approved change to proposal
Location	Mines at Mindy Mindy (approximately 70 kilometres north of Newman), Christmas Creek (approximately 100 kilometres north of Newman).	Mines at Mindy Mindy (approximately 70 kilometres north of Newman), Christmas Creek (approximately 100 kilometres north of Newman).
Main activities	Iron ore strip mining, pit backfilling, ore crushing, beneficiation (at Christmas Creek), mine rehabilitation and closure.	Iron ore strip mining, pit backfilling, ore crushing, beneficiation (at Christmas Creek), mine rehabilitation and closure.
Resource	Mindy Mindy: 68 million tonne channel iron deposit, 40 meters average pit depth; Christmas Creek: 1000 million tonne Marra Marra ore, 60 meters average pit depth.	Mindy Mindy: 68 million tonne channel iron deposit, 40 meters average pit depth; Christmas Creek: 1000 million tonne Marra Marra ore, 60 meters average pit depth.
Rate of production	Combined 45 million tonnes per annum.	Combined 45 million tonnes per annum.
Contingent activities	Pit dewatering, ore transport by 111 kilometres east-west rail link to approved north-south railway to Port Hedland for export.	Pit dewatering, ore transport by 111 kilometres east-west rail link to approved north-south railway to Port Hedland for export.
Areas disturbed	852 hectares – Mindy Mindy; 10135.5 hectares – Christmas Creek; 1600 hectares – railway.	852 hectares – Mindy Mindy; 10135.5 hectares – Christmas Creek; <b>1702 hectares – railway.</b>
Duration	20+ years	<b>Element Removed – not relevant</b>
Employment	800 personnel for construction on-site; 500 personnel divided between on-site and local towns (mainly Newman) for the operational stage.	<b>Element Removed – not relevant</b>
Water requirements	11.4 Gigalitres per annum or 31.2 megalitres per day from borefield to be developed.	11.4 Gigalitres per annum or 31.2 megalitres per day from borefield to be developed.
Power supply	Not a part of this proposal	<b>Element Removed – not relevant</b>

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**Dr Paul Vogel**  
CHAIRMAN  
Environmental Protection Authority  
under delegated authority

Approval date: 21 December 2009

# Attachment 5 to Statement 707

## Change to Proposal

**Proposal:** Pilbara Iron Ore & Infrastructure Project: East-West Railway & Mine Sites (Stage B)

**Proponent:** Fortescue Metals Group Limited

**Change:** To realign approximately 6 kilometres of the western portion of the access road used to haul ore from the Christmas Creek to Cloud Break mine sites. Note: no approval changes are required to the key aspects table below, however this has been reproduced in this case to eliminate errors identified in previous approval (Attachment 4).

### Key Characteristics Table:

Element	Description of proposal	Description of approved change to proposal
Location	Mines at Mindy Mindy (approximately 70 kilometres north of Newman), Christmas Creek (approximately 100 kilometres north of Newman).	Mines at Mindy Mindy (approximately 70 kilometres north of Newman), Christmas Creek (approximately 100 kilometres north of Newman).
Main activities	Iron ore strip mining, pit backfilling, ore crushing, beneficiation (at Christmas Creek), mine rehabilitation and closure.	Iron ore strip mining, pit backfilling, ore crushing, beneficiation (at Christmas Creek), mine rehabilitation and closure.
Resource	Mindy Mindy: 68 million tonne channel iron deposit, 40 meters average pit depth; Christmas Creek: 1000 million tonne Marra Marra ore, 60 meters average pit depth.	Mindy Mindy: 68 million tonne channel iron deposit, 40 meters average pit depth; Christmas Creek: 1000 million tonne Marra Marra ore, 60 meters average pit depth.
Rate of production	Combined 45 million tonnes per annum.	Combined 45 million tonnes per annum.
Contingent activities	Pit dewatering, ore transport by 119 kilometres east-west rail link to approved north-south railway to Port Hedland for export or via road to Cloud Break for transport to Port Hedland for export.	Pit dewatering, ore transport by 119 kilometres east-west rail link to approved north-south railway to Port Hedland for export or via road to Cloud Break for transport to Port Hedland for export.
Areas disturbed	852 hectares – Mindy Mindy; 10135.5 hectares – Christmas Creek; 1702 hectares – railway.	852 hectares – Mindy Mindy; 10135.5 hectares – Christmas Creek; 1702 hectares – railway.
Water requirements	11.4 Gigalitres per annum or 31.2 megalitres per day from borefield to be developed.	11.4 Gigalitres per annum or 31.2 megalitres per day from borefield to be developed.

Figure 6: Re-alignment of section of haul road between Christmas Creek and Cloud Break

**Dr Paul Vogel**  
CHAIRMAN  
Environmental Protection Authority  
under delegated authority

Approval date: 15.3.10



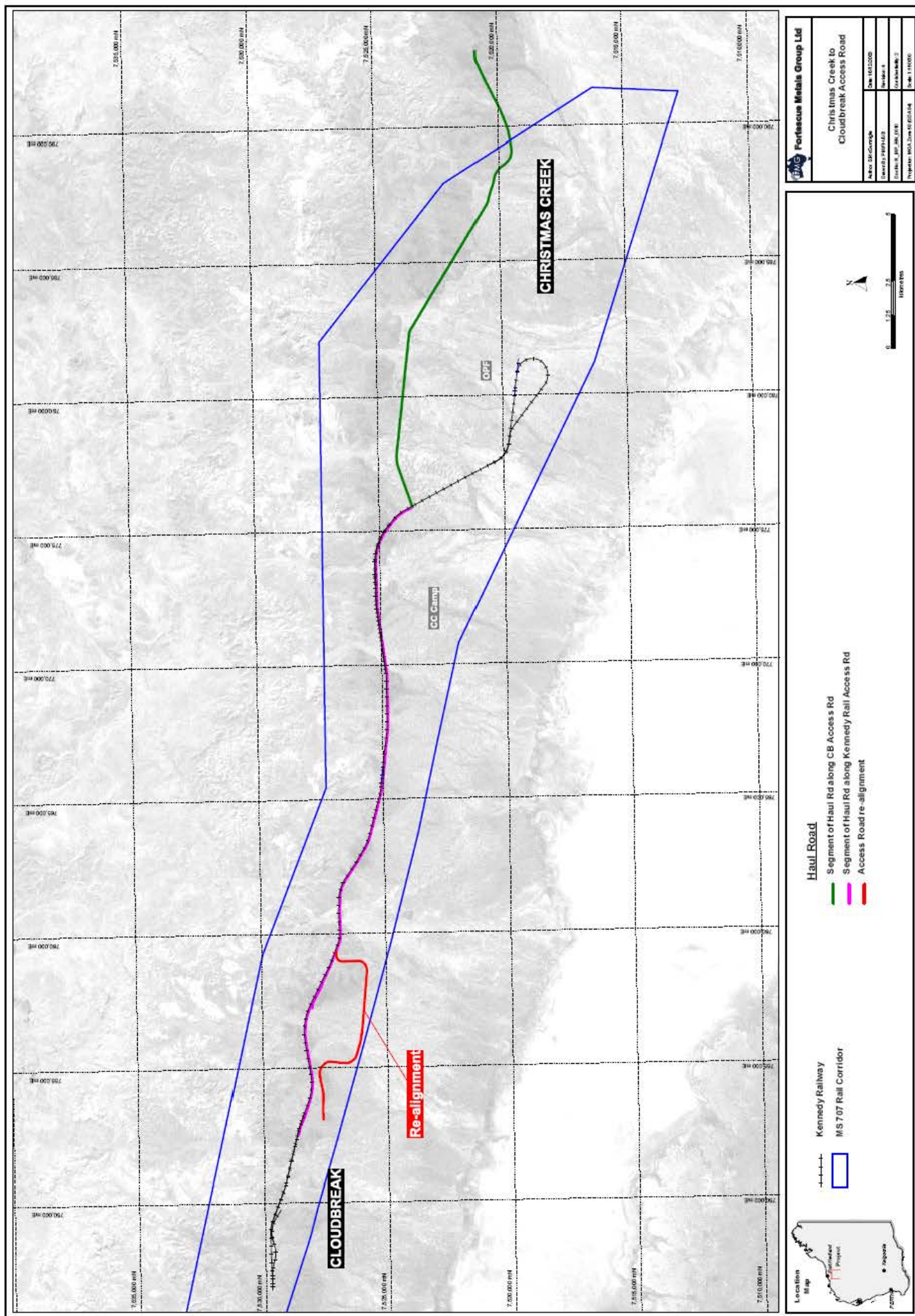


Figure 6: Re-alignment of 6km section of haul road between Christmas Creek & Cloud Break



## Attachment 6 to Statement 707

### Change to Proposal

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**Proposal:** Pilbara Iron Ore & Infrastructure Project: East-West Railway & Mine Sites (Stage B)

**Proponent:** Fortescue Metals Group Limited

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**Change:** Extension of pipeline from the Hillside East reinjection borefield into the Christmas Creek mine site

There are no changes to the Key Characteristics Table of Statement 707 as a result of this change.

**List of Figures:**

Figure 7: Change to Christmas Creek ore processing facility pipeline

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**Dr Paul Vogel**  
CHAIRMAN  
Environmental Protection Authority  
under delegated authority

Approval date: 6.4.10

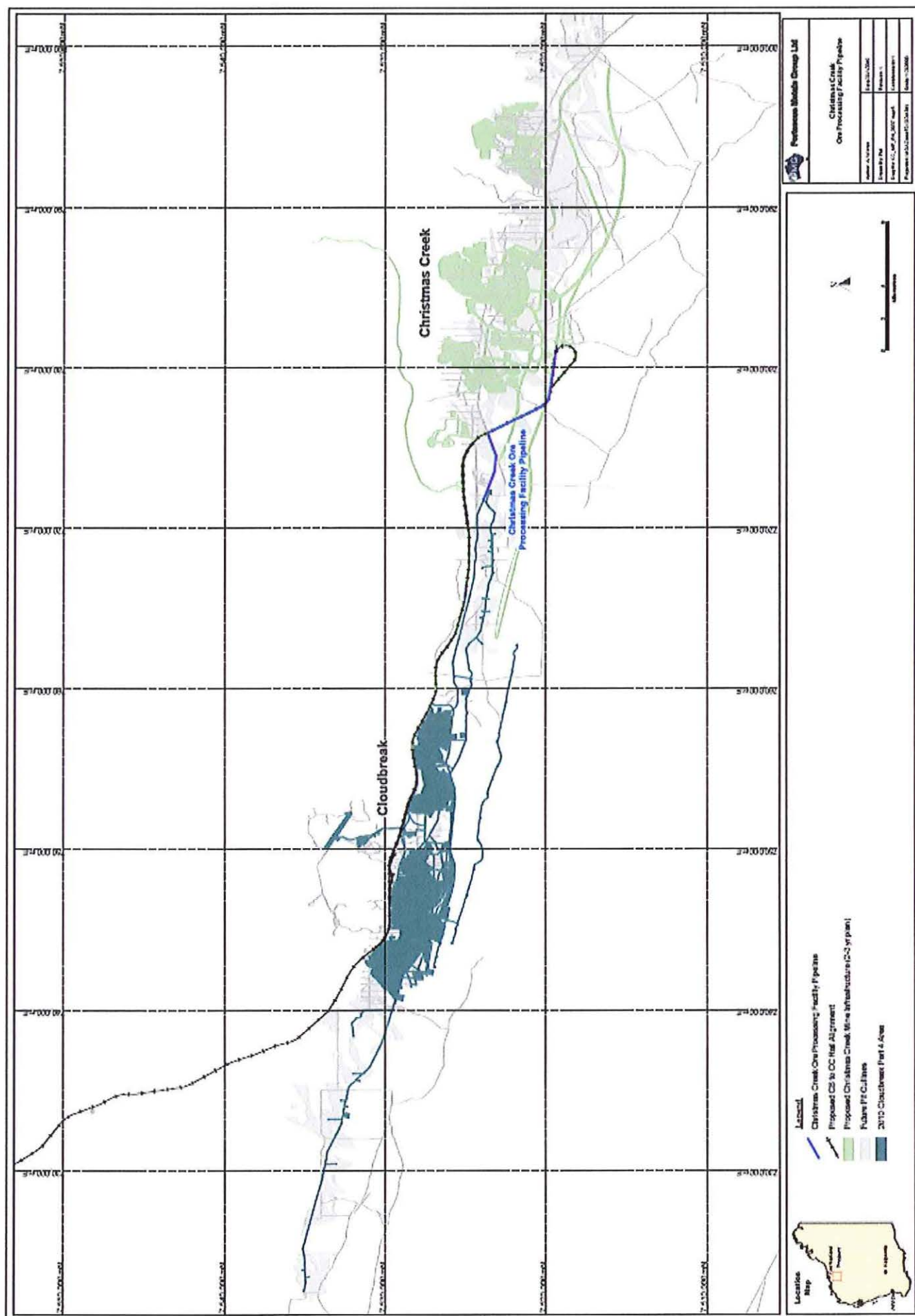


Figure 7: Change to Christmas Creek ore processing facility pipeline

## Attachment 7 to Ministerial Statement 707

### Change to Proposal

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**Proposal:** Pilbara Iron Ore and Infrastructure Project: east-west railway and mines sites (Stage B)

**Proponent:** Fortescue Metals Group Limited

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#### Changes:

- Construction of additional rail infrastructure;
- Construction of an access/transport route between the Christmas Creek mine site and Marble Bar Road, as shown in Figure 8 (this replaces the section of road between the Christmas Creek mine site and Marble Bar Road depicted in Figure 3 of Attachment 1); and
- Removal of production rate from Key Characteristics Table.

#### Key Characteristics Table:

<u>Element</u>	<u>Description of proposal</u>	<u>Description of approved change to proposal</u>
Location	Mines at Mindy Mindy (approximately 70 kilometres north of Newman), Christmas Creek (approximately 100 kilometres north of Newman).	Mines at Mindy Mindy (approximately 70 kilometres north of Newman), Christmas Creek (approximately 100 kilometres north of Newman).
Main activities	Iron ore strip mining, pit backfilling, ore crushing, beneficiation (at Christmas Creek), mine rehabilitation and closure.	Iron ore strip mining, pit backfilling, ore crushing, beneficiation (at Christmas Creek), mine rehabilitation and closure.
Resource	Mindy Mindy: 68 million tonne channel iron deposit, 40 metres average pit depth; Christmas Creek: 1000 million tonne Marra Mamba ore, 60 metres average pit depth.	Mindy Mindy: 68 million tonne channel iron deposit, 40 metres average pit depth; Christmas Creek: 1000 million tonne Marra Mamba ore, 60 metres average pit depth.
Rate of Production	Combined 45 million tonnes per annum	<b>element removed - not environmentally significant</b>

Contingent activities	Pit dewatering, ore transport by 119 kilometres east-west rail link to approved north-south railway to Port Hedland for export or via road to Cloud Break for transport to Port Hedland for export,	Pit dewatering, ore transport by 119 kilometres east-west rail link to approved north-south railway to Port Hedland for export or via road to Cloud Break for transport to Port Hedland for export,
Areas disturbed	852 hectares – Mindy Mindy 10135.5 hectares – Christmas Creek 1702 hectares - railway	<b>Mindy Mindy</b> <ul style="list-style-type: none"> <li>• <b>Not more than 852 hectares</b></li> </ul> <b>Christmas Creek</b> <ul style="list-style-type: none"> <li>• <b>Not more than 10135.5 hectares, including not more than 132 hectares within the access/transport route between the Christmas Creek mine site and Marble Bar Road, as shown in Figure 8.</b></li> </ul> <b>Railway (including associated infrastructure and sections of duplicate rail)</b> <ul style="list-style-type: none"> <li>• <b>1702 hectares</b></li> </ul>
Water requirements	11.4 Gigalitres per annum or 31.2 megalitres per day from borefield to be developed	11.4 Gigalitres per annum or 31.2 megalitres per day from borefield to be developed

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

#### List of Figures:

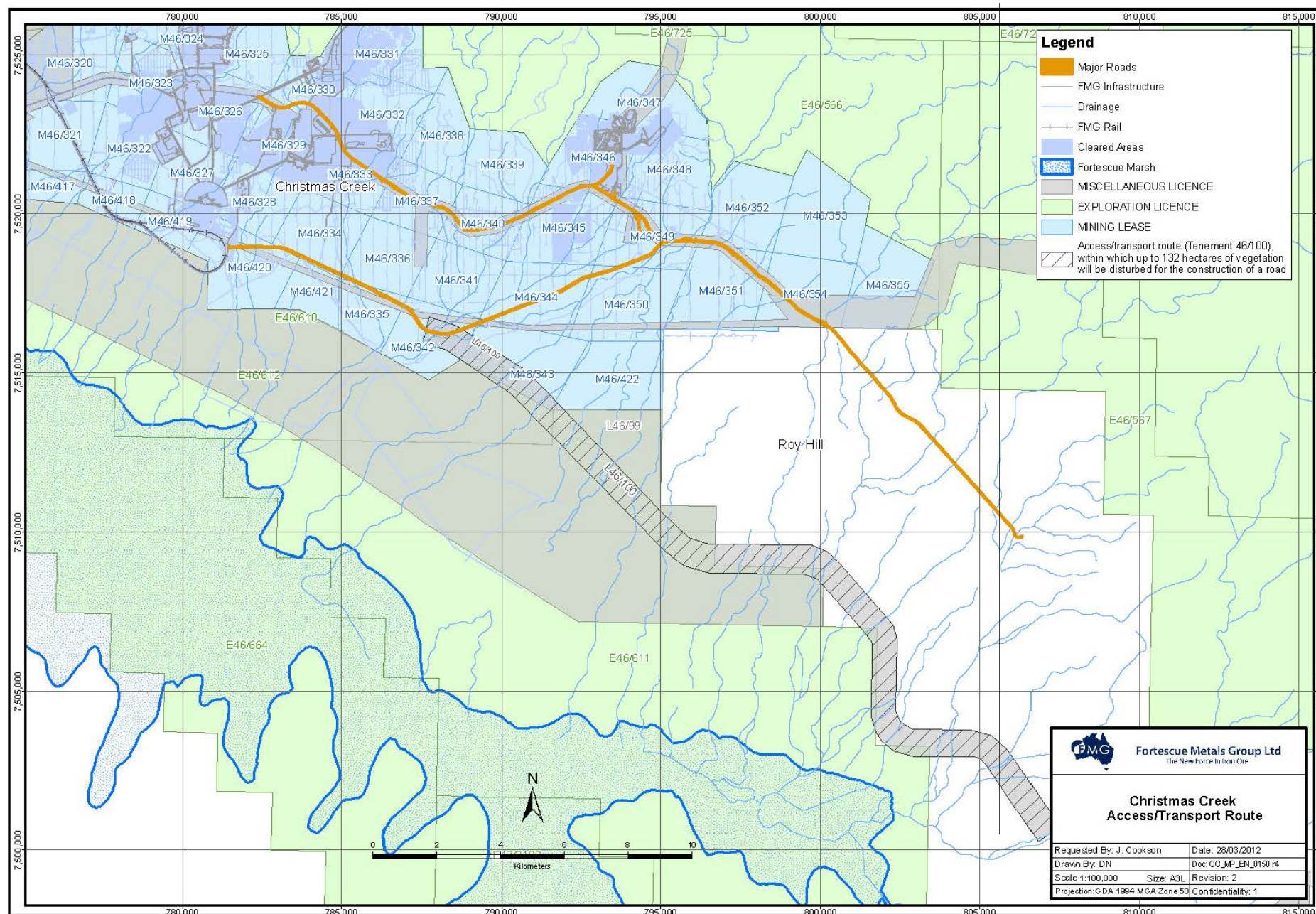
Figure 8: Access/transport route between the Christmas Creek mine site and Marble Bar Road

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**Dr Paul Vogel**  
CHAIRMAN  
Environmental Protection Authority  
under delegated authority

Approval date: 28 March 2012





**Figure 8.** Access/transport route between the Christmas Creek mine site and Marble Bar Road