



Environmental Protection Authority

Environmental Protection Act 1986

Section 41A(3)

STATEMENT OF REASONS

CONSENT TO UNDERTAKE MINOR or PRELIMINARY WORKS

Proposal: Eliwana Railway Project

Proponent: Fortescue Metals Group Limited

Decision

For the reasons outlined below, I, as a delegate of the EPA, have determined to consent to the minor or preliminary works outlined in Schedule 1 attached to this Statement of Reasons.

Background

On 7 July 2017, Fortescue Metals Group Limited (FMGL) referred the Eliwana railway Project to the Environmental Protection Authority (EPA) under section 38 of the *Environmental Protection Act 1986* (EP Act). The Proposal includes the construction and operation of a 120km railway linking the proposed Eliwana Iron Ore Mine with the existing Solomon Iron Ore Mine.

The proposal would require disturbance of up to 3,690 ha of native vegetation and fauna habitat within a 57,000ha development envelope. Water abstraction for the proposal would be up to 2 gigalitres per annum during the 1-2 year construction period, and 100,000 kilolitres per annum during the operation phase, from local bore fields.

The EPA determined to assess the Proposal at the level of Public Environmental Review with a four-week review period. The Environmental Scoping Document (ESD) for the proposal was approved on 21 December 2017, and the proponent submitted the first draft of their Environmental Review Document (ERD) on 13 February 2018. Following review of the ERD, the EPA will determine whether the document is suitable for public review.

In advance of a decision or agreement in relation to whether or not the Proposal may be implemented under section 45 of the EP Act, the Proponent has sought the EPA's consent to undertake minor or preliminary works related to the Proposal.

The original application to undertake minor and preliminary works was submitted on 16 February 2018, with a revised application submitted on 5 April 2018. Following release of the application for public comment from 18 April 2018 to 25 April 2018, the proponent undertook further consultation with the representatives of the Traditional

owner groups in the area, the Puutu Kunti Kurrama and Pinikura (PKKP), and the Wintawari Guruma Aboriginal Corporation (WGAC).

Additional consultation resulted in the proposed works being realigned to avoid crossings of Duck Creek. An updated application was submitted on 17 July 2018 with the revised alignment.

Further consultation with the WGAC was conducted subsequent to this application, and a letter was received from FMG on 10 August 2018 indicating that the proposed construction of bridge footings near the Hamersley Station are no longer a component of the proposed works. The final application describing the proposed minor and preliminary works is considered to comprise of the application received on 17 July 2018 and the letter received on 10 August 2018.

Relevant Statutory and Administrative Provisions

After the EPA decides to assess a proposal, and before a decision or agreement is made under s45 of the EP Act, all persons are prohibited from implementing a proposal, and relevant decision making authorities are prohibiting from making a decision which would allow the proposal to be implemented, EXCEPT in relation to minor or preliminary works which the EPA has consented may be implemented – see sections 41(4) and 41A(3) of the EP Act.

If the EPA consent to the minor or preliminary works being done, the person proposing to undertake those works may still need to obtain other authorisations from other decision making authorities.

Section 3.5 of the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual 2016* guides what information the EPA requires from a person wanting to undertake minor or preliminary works.

In considering the request for consent, I considered whether the:

- work is associated with the implementation of the proposal
- potential environmental impacts of the work are significant
- work would constitute the irreversible and substantial implementation of the proposal, and
- work is justified.

Materials considered in making this decision

In determining whether to consent to the minor or preliminary works I have considered the following:

1. Fortescue Metals Group Limited (FMG), *Minor or Preliminary Works Application EW-AP-EN-0003*, Received February 2018, and updated version received 17 July 2018
2. Fortescue Metals Group Limited (FMG), *Minor or Preliminary Works: Response to Queries*, correspondence received 12 March 2018.

3. Fortescue Metals Group Limited (FMG) Eliwana Railway Proposal MPW – Removal of bridge footings, correspondence received 10 August 2018
4. Spatial Data provided by FMG on 10 August 2018 (DWER Ref # 2018-1533862657125)
5. Public comment received during the seven-day public consultation process, and subsequent information received from Traditional Owners.

Consideration

1. Proposed work associated with proposal

The proposed works are associated with the proposal and would be carried out as part of the proposal following approval in the event that the application for Minor and Preliminary works was rejected. All proposed works would be undertaken within the development envelope of the proposal.

2. Environmental justification of the proposed works

Approval of the proposed works would allow these works to be conducted during the dry season, reducing the risk of erosion and sedimentation as a result of heavy rainfall striking during ground disturbing works, with particular regard to works intercepting creeks for linear infrastructure such as roads and water pipelines.

Approval of the proposed works would also allow the work to be carried out within a minimised disturbance footprint, with a longer timeframe enabling staging of work and subsequent opportunities to locate laydown areas and topsoil stockpiles in previously disturbed areas.

3. Details of the proposed work, and Significance of potential impacts

Early works for the railway project include construction of two rail construction accommodation camps, access roads, and water supply pipelines. Existing exploration tracks would be widened and upgraded for access roads where possible. Minor works would be required to establish one crossing of a conveyor associated with Rio Tinto Iron Ore’s Silvergrass project, however this would be located on previously cleared land within existing infrastructure corridors.

The proposed works do not include any track or pipeline crossings of Duck Creek, or access bridge footings in proximity to Hamersley Station.

Borrow pits, topsoil stockpiles, and up to eight turkeys nests storage dams would be required to complete the early works.

Figure 1 shows the locations of the proposed early works. Disturbance associated with the early works would include:

Item	Disturbance (in hectares)
Rail camp 50 km	15.0
Rail camp 95 km	15.0
Water pipeline and/or access roads	112

Borrow pits	10.0
Turkeys nests	4.8
Topsoil stockpiles	3.5
Minor bridge works	1.3
Total	159.6

The 159.6 ha of clearing for the proposed works as detailed above represents 4.3% of the 3,690 ha proposed disturbance associated with the Eliwana Railway Project.

Significance of Potential Environmental Impacts

The Preliminary key environmental factors associated with the proposed Eliwana Iron Ore Mine Project as identified in the ESD are:

1. Flora and Vegetation;
2. Terrestrial Fauna;
3. Hydrological Processes;
4. Inland Waters Environmental Quality; and
5. Social Surrounds.

Of these, the following factors were considered likely to be impacted by the proposed works:

1. Social Surrounds;
2. Flora and Vegetation;
3. Terrestrial Fauna; and
4. Hydrological Processes.

The potential impacts of the proposed early works on each of these factors is discussed below.

Social Surrounds (Indigenous heritage)

The proposed works are located within the Puutu Kunti Kurrama and Pinikura (PKKP), and the Eastern Guruma Native Title determination areas. The Eastern Guruma people are represented by the Wintawari Guruma Aboriginal Corporation (WGAC).

The proponent has undertaken heritage surveys in the area in consultation with the PKKP and WGAC. Following the public comment period for the minor and preliminary works applications, WGAC expressed concern regarding two aspects of the proposal, the proposed crossings of Duck Creek, and the construction of bridge footings in proximity to Hamersley Station. Subsequent to additional consultation FMG has removed these aspects from the early works proposal.

The early works have been designed to avoid significant heritage places where practicable. Where sites are identified that would be impacted by the works, appropriate approvals would be obtained prior to ground disturbance. The EPA considers that, given the consultation conducted and alteration of the originally proposed works, any impacts to heritage sites associated with the minor and preliminary works can be managed under the *Aboriginal Heritage Act 1972*.

Flora and Vegetation

The proposed works would result in clearing of up to 156.6 hectares within the 38,029 hectare Railway Development Envelope (Figure 1). Flora and Vegetation surveys have been carried out within the early works proposal area during investigations for the Railway proposal.

Impacts to Flora and Vegetation as a result of the proposed works are considered unlikely to be significant for the following reasons:

- No Threatened Ecological Community or Priority Ecological Community would be impacted as a result of the proposed works. The nearest recorded TEC or PEC occur 600m from the proposed works.
- Thirty-nine vegetation communities would be impacted by clearing for the early works proposal, of these thirty-eight would be reduced by less than 6% of their currently mapped extent.
- The remaining vegetation association, EvAcVfDICf, would be reduced by up to 21.43% of the currently mapped extent, however this is due to the limit of mapping extent and not a reflection of the actual extent of the vegetation unit. Aerial photography indicates that the unmapped extent of this vegetation unit extends both upstream and downstream of the proposed works area.
- No Threatened Flora is expected to occur in the early works disturbance footprint.
- Two locations of the Priority 3 species *Triodia basitricha* would be impacted by road construction, However disturbance would represent only 0.17% - 0.35% of known individuals.

Terrestrial Fauna

The proposed works would result in clearing of up to 156.6 ha of terrestrial fauna habitat within the 38,029 ha Railway Development Envelope. Extensive fauna surveys have been carried out within the Eliwana Railway Project area, which have been used to assess the impact of the proposed works.

The proposed works are not considered likely to cause a significant impact to Terrestrial fauna for the following reasons:

- The proposed works have been designed to avoid areas of significant fauna habitat identified during extensive Fauna surveys for the Eliwana Iron Ore Mine project. In particular, design of the proposed works program avoided areas of significant habitat for the Ghost bat, Pilbara leaf-nose bat, Pilbara Olive Python, and Northern Quoll.
- The three conservation significant species which Table 7 of the Minor and Preliminary Works application indicates are likely to use the areas impacted by the proposed works - the Peregrine Falcon, Grey Falcon, and Pebble-mound mouse - are either highly mobile and able to avoid areas of disturbance, or in the case of the Pebble-mound mouse (Priority 4), have extensive distribution across the Pilbara.

Hydrological Processes

Water supply for the proposal would be less than one Gigalitre of water, to be supplied by a number of bores located along the railway. The proposed access roads and water pipelines have the potential to alter surface water flows by intercepting significant drainage lines.

The proposed works are not considered to be likely to cause significant impacts to hydrological processes, for the following reasons:

- Drawdown associated with abstraction is minimal relative to that required for the proposal.
- Construction of bores and abstraction of groundwater would be regulated under the *Rights in Water and Irrigation Act 1914*.
- No major earth works which could divert or trap surface water flows are proposed as part of the early works.
- The proposed roads and pipelines cross only lower order drainage lines that do not experience significant surface water flow.
- Crossing of drainage lines is limited and would be at-grade, there are no flood ways or culverts required.

4. Proposed rectification actions

The early works proposal has been designed with consideration for the potential to rehabilitate and reverse any environmental impacts that may occur. In the event that the Eliwana Railway project does not proceed, all infrastructure including the accommodation camps, roads and water pipes could be decommissioned and removed.

Borrow pits would be backfilled, and disturbed areas would be contoured and revegetated. Under the Mining Act 1978, the proponent is required to submit a Mining Proposal for the approval of mining-related infrastructure, including a mine closure plan detailing how disturbance would be rehabilitated if required.

Schedule 1

Minor or Preliminary Works

Authorised Work(s)	Location	Authorised extent
<p>The following works are authorised in their entirety:</p> <p>1. Construction, operation and maintenance of:</p> <ul style="list-style-type: none"> • Two rail construction accommodation camps (Railway camp 50 and Railway camp 95), including waste water treatment plants and spray fields. • Ongoing operation of Eliwana Exploration camp • Linear infrastructure including access roads and water supply pipelines • Borrow pits for the supply of construction materials required for the accommodation camps, access roads and pipeline referred to in this schedule. • Topsoil stockpiles • Turkey nest dams • Minor bridge works for conveyor crossing. <p>2. Abstraction of groundwater from existing and proposed production bores.</p> <p>up until such time as the later of one of the following occurs:</p> <ol style="list-style-type: none"> a. notice issued under s 45(8) of the EP Act; or b. statement issued under s45(5) of the EP Act is final (that is, after period in which to lodge an appeal under s 100(3) has expired, or appeal decision under s109(3), in respect of an appeal lodged under s 100(3), is published). <p>and;</p> <p>3. rehabilitation of the area/s identified in Figure 1 in accordance with current EPA rehabilitation guidance, or if an implementation statement is issued for the Proposal, in accordance with any implementation conditions relating to rehabilitation</p>	<p>Figure 1</p>	<p>Clearing of up to 30 hectares.</p> <p>Located within previously cleared areas.</p> <p>Clearing of up to 112 hectares.</p> <p>Clearing of up to 10 hectares.</p> <p>Clearing of up to 3.5 hectares.</p> <p>Clearing of up to 4.8 hectares.</p> <p>Clearing of up to 1.3 hectares.</p> <p>Up to 1 Gigalitre.</p>

Figure 1 – Location of Minor and Preliminary Works within Railway Development Envelope (Spatial Data Located at DWER Ref # 2018-1533862657125)

