

## Attachment A – Project description

### PROPOSAL DESCRIPTION

The Proposal is located in the Pilbara region of Western Australia, predominantly within mining tenement M45/1243-I and includes the following key elements as well as any associated activities:

- Clearing of a Conceptual Footprint of up to 1,913 ha within a 4,465 ha Development Envelope
- Above and below water table mining of five open cut pits
- Ore crushing and truck loading infrastructure
- Waste dumps, ore stockpiles, topsoil stockpiles and sub-soil stockpiles
- Support facilities: including small scale power generation at each of the mine facilities (including but not limited to workshops and crusher), telecommunications tower, solar field, workshops, hydrocarbon storage, explosive mixing and storage facilities, laydown areas and offices
- Linear infrastructure: including heavy and light vehicle access roads, conveyors, pipelines and power and communications distribution
- Infrastructure for surface water management: including diversion drains, levees and culverts
- Infrastructure for dewatering and groundwater abstraction for water supply
- Dewatering water management and associated infrastructure for discharge to surface water systems
- Construction and operation workforce accommodation camp/s
- Transport of the ore to the existing Roy Hill project or other third parties.

### Exclusions

To date, various exploration and investigation activities have been completed in support of the Proposal. These include the clearing of access tracks and drill pads, for both resource and groundwater studies, and the construction of an accommodation camp to support these activities. Clearing of over 27 ha has occurred to date for these purposes, with clearing undertaken in accordance with the *Mining Act 1978 (WA)* (Mining Act).

The scope of the Proposal subject to assessment under Part IV of the *Environmental Protection Act 1986* (EP Act) and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) therefore excludes the following low impact activities:

- Utilisation and/or refurbishment of existing infrastructure including access tracks and accommodation camp.
- Ongoing low impact exploration and investigation activities to inform resource definition and the environmental impact assessment of the Proposal.
- Development and use of groundwater supplies to support the exploration and investigation activities described above.

Any new ground disturbance to support the above activities will be minimised and located to avoid significant habitat features. Approvals for the proposed ongoing exploration and investigation activities will be sought separately under the EP Act, Mining Act and *Rights in Water and Irrigation Act 1914 (WA)* (RiWI Act), as required.

## KEY CHARACTERISTICS OF THE PROPOSAL

The key characteristics of the Proposal are summarised in **Table 1** and **Table 2**.

**Table 1** Key characteristics

Summary of the Proposal	
<b>Proposal title</b>	McPhee Creek Iron Ore Project
<b>Proponent name</b>	Atlas Iron Pty Ltd
<b>Short description</b>	The Proposal is for the above and below water table mining of iron ore from five open cut pits, located approximately 30 km north of Nullagine. The Proposal includes the development of mine pits and associated infrastructure including but not limited to crushing and screening facilities, waste landforms, run of mine pad, access roads, solar field, administration, accommodation camp, stockpile and laydown areas, borrow pits, groundwater bores and transfer infrastructure, explosives magazine, fuel storage and landfill.

**Table 2** Proposed extent of physical and operational elements

Element	Proposed Extent
<b>Physical elements</b>	
Mine and associated infrastructure, including pits and waste rock dumps	Clearing of up to 1,913 ha within a Development Envelope of 4,465 ha (Figure 2 in Attachment B)
<b>Operational elements</b>	
Groundwater abstraction	Abstraction of up to 16 GL/a groundwater for mine dewatering
Surplus water management	Controlled surface discharge of surplus water to three creeklines; McPhee Creek, branch of McPhee Creek and Lionel Creek (Figure 2 in Attachment B).

## DETAILED DESCRIPTION

### Mining

Mining will use conventional drill and blast, load, and haul methods, with a production rate of up to 14 Mtpa of ore. A portion of the ore is located below the water table and as such dewatering will be required. It is anticipated that up to 16 GL/yr of dewatering will initially be required, which will decrease over the life of the mine.

Mining will be undertaken on a 24-hour basis, seven days a week. Clearing of up to 1,913 ha of vegetation will be required. The expected footprint of the Proposal is referred to as the Conceptual Footprint; however, the exact location of the footprint may change as mine planning progresses. Where accessible, topsoil and vegetation will be removed during early development and stockpiled in adjacent well-drained areas. Topsoil

stockpiles will be managed appropriately so that the material will be available for future rehabilitation operations.

The McPhee Creek iron ore may be subject to further processing off site, which does not form part of this application.

### **Processing**

Once blasted, broken ore and waste rock will be loaded separately into haul trucks. Ore will be transported via the haul road network to the Run of Mine (ROM) pad. Crushing may be undertaken using a dry crushing and screening facility. Stockpiling of marginal ore material will also be undertaken to ensure maximum resource recovery. No tailings or wet waste product will be produced.

Following mining, the McPhee Creek iron ore will be stockpiled for transport via trucks off the McPhee Creek site.

### **Haulage**

Ore will be transported by truck to third parties for processing or may be on sold as direct shipping ore. Any processing at third party locations is outside of the scope of this Proposal.

### **Waste Rock Management**

Waste rock will initially be used to construct infrastructure (e.g. access roads and ramps, ROM and stockpile bases, drainage structures and safety bunds) with the remainder stored in above ground waste rock dumps or in-pit.