

# Magnetite Expansion Project



## Project Introduction

April 2022

### Background

SIMEC Mining has been mining in the South Middleback Range (SMR) since 1989 starting with mining of hematite iron ore at the Iron Duke Mine. This type of iron ore is found throughout the Middleback Ranges and its reserves are diminishing.

Mining of magnetite iron ore started in 2007 with Project Magnet. This project included the slurry pipeline which transports the product from SMR to the Whyalla Steelworks.

Magnetite represents the future of the Whyalla Steelworks operations with approximately 4-5 years of full-scale hematite operations remaining.

In addition, the current Magnet pit shown in **Image 1** also has an approximate life of 5-7 years.

### Project Detail

Magnetite Expansion Project is currently split into three stages, Magnetite Expansion Project Stage 1 (MEP1), Magnetite Expansion 2 (MEP2) and Magnetite Expansion 3 (MEP3)

MEP1 relates to various improvements and introduction of new technology in the existing

operations that assist to improve efficiency and project life. This stage is currently underway. MEP3 relates to possible capacity expansion beyond MEP2 and requires identification and development of additional ore resources.

This information sheet is primarily about the proposed MEP2 which will involve a larger footprint than current operations and MEP1.

With MEP2, SIMEC Mining is seeking to –

- Increase total magnetite concentrate output
- Increase the life of mine by utilization of ore previously considered waste within existing and future resources
- Utilise some of the technologies being introduced in MEP1
- Achieve a more sustainable cost per tonne of product
- Extend mining to ~2045 and sustain existing employment and investment in the Whyalla region and throughout South Australia.

This is all underpinned by a pre-feasibility study which is nearing completion. A more detailed feasibility study is expected to commence by July 2022.

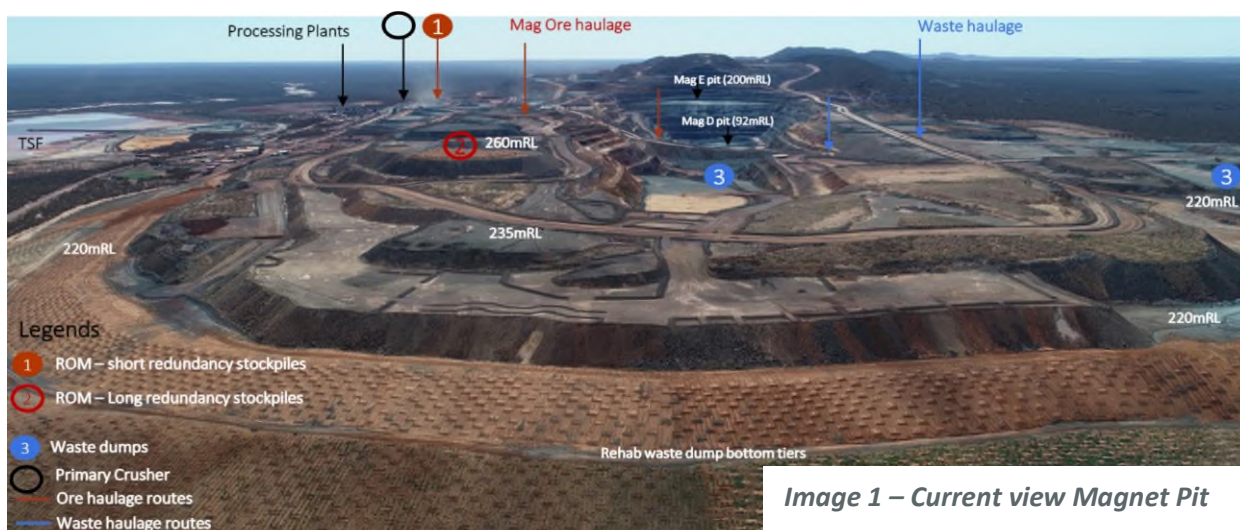


Image 1 – Current view Magnet Pit

## Footprint

The ore body has been identified as extending northward and beneath current operations at SMR. MEP2 proposes to create a larger pit from the Duchess North pit south to the Magnet pit – refer to **Image 2 – MEP2 Pit footprint** (one possible design).



**Image 2 – MEP2 Pit Footprint (one possible design)**

While the pit is determined by the positioning of the ore body, other aspects of the proposed operations are currently in concept phase which includes design and location options.

These include -

- Waste rock dumps for waste storage,
- A new tailings storage facility (TSF),
- A new concentrator plant - proposed to be located within close proximity to the existing TSF,
- An additional slurry pipeline, as the current pipeline will not be able to meet the increase of slurry, and
- Upgrades to facilities at the Whyalla Steelworks' Pellet Plant and Port

Refer to **Image 3 – MEP2 Footprint Conceptual Options** for overall footprint and link between mining and steelworks sites.

Importantly, with each of these operational areas under review, the business must consider ecological, heritage, environment, social and economic factors. These are being addressed through a series of studies and engagement with key stakeholders.

For the Whyalla Steelworks end of MEP2 there are several projects under consideration. A key project in the concept phase includes an upgrade within the Pellet Plant area with new slurry filtration facilities. More information on this will be shared when information is available.

## Current Studies

As part of the pre-feasibility and feasibility stages of the project a number of studies are required to better understand the footprint of MEP2, its size, value and potential impacts. These studies include but are not limited to, mining optimization, geochemistry, flora and fauna, heritage, dust management, air quality management, noise management and tailings storage facilities at the mine site and at the Whyalla Steelworks' Pellet Plant area.

A number of these studies are currently underway and SIMEC Mining will continue to undertake further work throughout the various stages of the project.

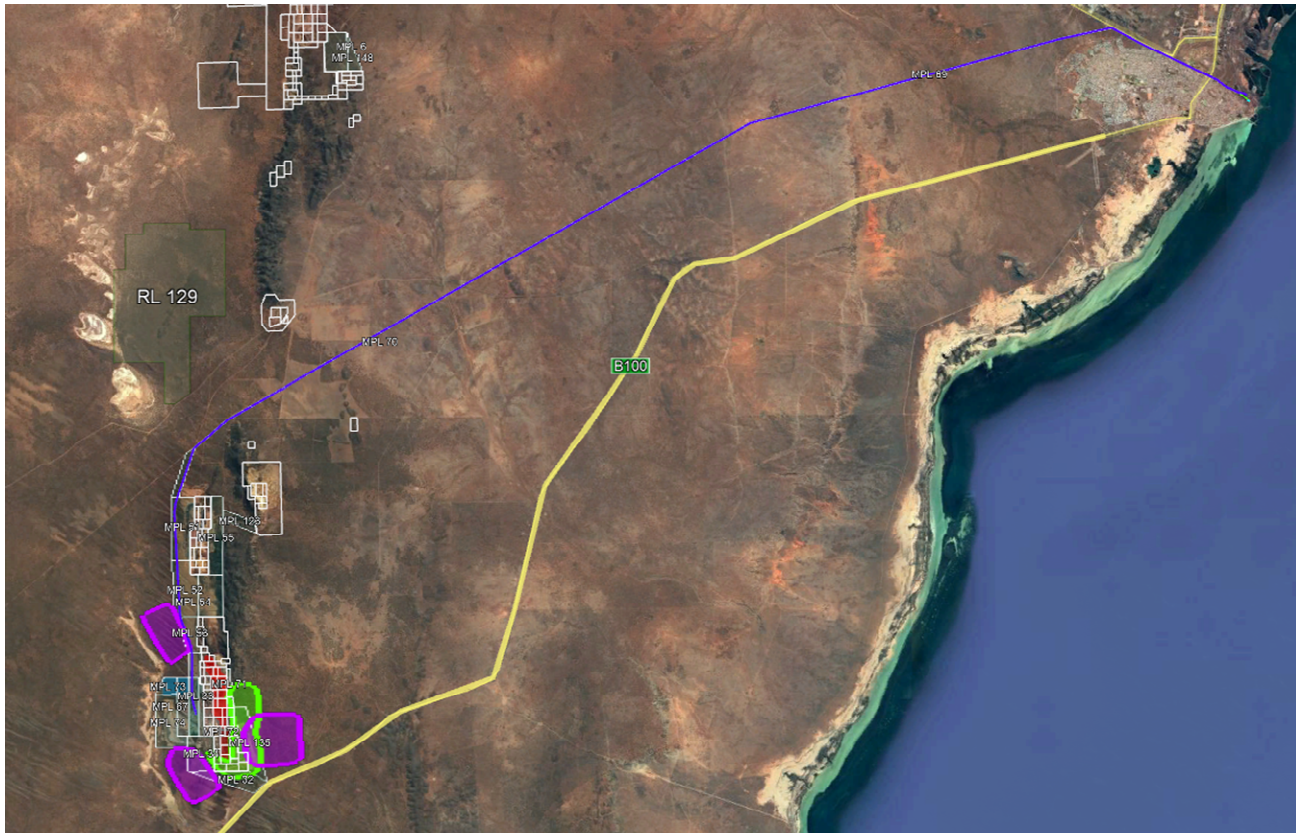


Image 3 – MEP2 Conceptual Footprint Options

## Regulatory Approvals

There are several regulatory approvals that SIMEC Mining must obtain prior to commencing most construction or operations of MEP2. These include but are not limited to Government approvals from the Department for Energy and Mining, the EPA, the Department for Environment and Water and the State Commission Assessment Panel.

## Engaging with the Community & Stakeholders

Further to Government related approvals, SIMEC Mining is committed to engaging and working together with key stakeholders including landholders, Traditional Owners, Whyalla community, key interest groups and all levels of

government on the development of this new mining activity.

Further information will be provided as the project progresses and ongoing consultation with the wider Whyalla and Middleback Range community will also be conducted to obtain feedback.

The business is committed to ongoing engagement including by information updates, presentations and meetings.

## Further Information

For further information, please contact SIMEC's Community and Stakeholder Engagement Advisor.

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