



**Alara Resources Limited**  
ABN 27 122 892 719  
Level 14, The Forrest Centre  
221 St Georges Terrace  
Perth WA 6000 Australia

Telephone | +61 8 9214 9787  
Facsimile | +61 8 9322 1515  
Web | [www.alararesources.com](http://www.alararesources.com)  
E-mail | [info@alararesources.com](mailto:info@alararesources.com)

## ASX/MEDIA RELEASE

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# Mine Schedule Update - Khnaiguiyah Feasibility Study

## Highlights

- Proposed production profile increases to an average of 90,000t of zinc (75,000t previously) and 6,800t of copper (5,800t previously) per annum as concentrates in the first 4 years to deliver improved project economics.
- No pre-stripping now required.
- Mining schedule highlights the potential to achieve a positive operating cash flow position within ~3 months from commencement of mining.
- Project life extended from 10 to 14 years.

## Update

**Perth:** Alara Resources Limited (ASX: AUQ) (**Alara**) is pleased to provide an update regarding the Definitive Feasibility Study (**DFS**) for the Khnaiguiyah Zinc-Copper Project in Saudi Arabia (**Project**).

### DFS Status update

As reported in a DFS Update provided on 14 December 2012<sup>1</sup>, mine scheduling remains the last major outstanding item to be completed for the DFS.

This work is being undertaken in two stages:

- Stage 1: Using advanced mine planning optimisation software and techniques to produce a series of optimal pit shells together with an annual mining and processing schedule; and
- Stage 2: Using the outputs from Stage 1 to produce detailed pit designs, detailed costings, a JORC Reserve statement and a quarterly production schedule.

Stage 1 is now complete. The optimisation work undertaken applied simultaneous optimisation techniques incorporating mining parameters and cut off grades to maximise returns from 3 separate pits in Mineralised Zones K1, K2 and K3, each with 2 to 3 domains of mineralisation. The work examined multiple scenarios of cut back stages, pit sequencing, stockpile strategies, mining limits and vertical rates of advance. Approximately 88 alternative schedules were investigated in the preliminary runs and 22 schedules were investigated in greater detail.

This work has delivered an optimised annual mining schedule that enables the higher grade mineralised materials present in Mineralised Zones K1, K2 and K3 to be accessed and processed in the first few years of operation, rather than progressively over the life of mine.

<sup>1</sup> Refer AUQ ASX market announcement dated 14 December 2012 and entitled "[Capital and Operating Cost Estimates - Khnaiguiyah Zinc-Copper Project Feasibility Study](#)"

As the higher grade materials are being mined and processed, approximately 10 million tonnes of relatively lower grade material will also be progressively stockpiled, to be processed after the higher grade material.

Whilst the expected average annual production over the first ten years of mine life is still approximately an average of 75,000 tonnes of zinc metal and 5,800 tonnes of copper metal as concentrates, the optimised schedule indicates that by 'front-ending' the higher grade material, an average of 90,000 tonnes of zinc metal and 6,800 tonnes of copper metal in concentrate can now be produced in the first four years. This will have a material positive impact on project economics and, in particular, will accelerate the capital payback period.

Furthermore, since mining is now scheduled to commence at Mineralised Zone K1, where the mineralised material is close to surface, no pre stripping will be required.

The new mining schedule highlights the potential to achieve a positive operating cash flow position much sooner (within ~ 3 months) following commencement of mining. This has significantly reduced expected pre-production costs.

The combination of incorporating Mineralised Zone K1 into the mine schedule together with enhanced stockpile management also means that the expected project life has now increased by four years, from 10 to 14 years, whilst maintaining the increased throughput rate of 2 million tonnes per annum.

Key assumptions used in the Stage 1 mine scheduling work are:

Zinc price (based on LME Future Price)	US\$2,335/tonne
Copper price	US\$7,070/tonne
Maximum mining rate	20Mtpa

Stage 2 mine scheduling work, which will produce the detailed pit designs and a quarterly production schedule necessary to complete the DFS, is expected to take a further 4 - 6 weeks to complete.

*"Cutting edge simulation techniques adopted by Alara have delivered superior results. The project is now expected to deliver significantly more zinc and copper in the first 4 years of production than was previously forecast, which has a material impact on project economics. The removal of the need for any pre-stripping during initial mining operations will reduce capex and extend the project life and should significantly improve the fundability of the Project",* Shanker Madan, Managing Director.

– ENDS –

**For further information, please contact:**

Shanker Madan  
Managing Director

T | +61 8 9214 9787  
E | [smadan@alararesources.com](mailto:smadan@alararesources.com)