

31 March 2025

## ASX RELEASE

### Cloncurry Project Update – Tick Hill Gold Joint Venture signed; Preliminary Economic Assessment completed

**AuKing Mining Limited (ASX: AKN, AuKing)** is pleased to advise that a significant joint venture term sheet has been signed with the current owner of the Tick Hill gold mine, Tick Hill Mining Pty Ltd. In addition, AuKing has completed an independent Report that confirms findings related to tailing reprocessing from the previously announced 2020 Tick Hill Pre-Feasibility Study.

#### HIGHLIGHTS

- **Tick Hill Joint Venture:** AuKing, Orion Resources Pty Ltd (“Orion”) and the current owner of the historical Tick Hill mine, Tick Hill Mining Pty Ltd (“THM”) have entered into a joint venture term sheet, setting out the process to establish a processing operation at Tick Hill on a 50/50 basis, aimed at the existing tailings stockpiles. The joint venture may extend to a restart of the historical open pit at Tick Hill.
- **Feasibility Study for early gold production:** the new Tick Hill JV will contemplate establishment of a processing operation that is based at the Tick Hill site, utilizing suitable plant relocated from Lorena to create gold-loaded carbon material followed by gold dore production at the existing Lorena elution circuit and gold room facilities. A feasibility study with inputs from AuKing, Orion and THM for this proposed activity will commence immediately.
- **2020 Pre-Feasibility Study:** on 5 June 2020, then owner of Tick Hill, Carnaby Resources Limited (ASX:CNB), announced details of a Pre-Feasibility Study and a Maiden Ore Reserve (“2020 PFS”) confirming a technically and economically viable mining and toll treatment project for the Tick Hill Gold project. This study assumed an A\$2,300/oz gold price at the time (now approximately A\$4,900/oz).
- **Independent PEA confirms key 2020 PFS Findings:** AuKing recently engaged an independent consultant to carry out a Preliminary Economic Assessment (“PEA”) of the key 2020 PFS reported findings. The PEA concluded that the proposed tailings retreatment at Tick Hill is technically and financially viable and the project should proceed to a final Feasibility Study. The 2020 PFS noted the tailings have a high gold grade and testwork has shown higher recoveries can be achieved by finely grinding and reprocessing this material. The PEA also highlighted the potential that mining of the Tick Hill open pit to remove the crown pillar left behind by previous mining could significantly add to the overall economics.

*AuKing's Managing Director, Mr Paul Williams, said that the new Tick Hill joint venture is an important step in establishing a clear pathway to early gold production at the Lorena processing plant near Cloncurry.*

*"As one of the historically highest-grade gold mines in Australia, the opportunity to work in joint venture with the current Tick Hill owners is very compelling for Orion. The intended establishment of early cashflows from this joint venture provides Orion with the ability to establish its credentials with the Cloncurry Gold Project and allows for the development of other projects in the portfolio (such as Mt Freda) to be funded for the future," said Mr Williams.*

### **Tick Hill Project**

Situated 120kms south-east of Mount Isa, Tick Hill was one of the richest gold deposits in Australia. Total production from the resource was 665,000t @ 25g/t (534,000 ounces) from August 1991 to February 1994.

On 5 June 2020, previous owner Carnaby Resources Limited (ASX:CNB) announced details of a Pre-Feasibility Study and a Maiden Ore Reserve confirming a technically and economically viable mining and toll treatment project for the Tick Hill Gold project. Significantly, the 2020 PFS applied an assumed gold price of A\$2,300/oz, which is more than half the gold price at the present day.



*Figure1 – Google Earth image of the Tick Hill mine and tailings storage facility*

Furthermore, the 2020 PFS assumed the processing of the ores from Tick Hill to be undertaken by way of toll treating at a third party-owned processing facility, which imposed additional haulage costs on the financial modelling. The Lorena processing plant, for example, is situated 160kms away, as indicated in Figure 2 below. If processing is undertaken at Tick Hill itself (as is now proposed), there could be economic benefit from the removal of haulage costs.



Figure 2 – Mount Isa/Cloncurry regional map, highlighting location of Tick Hill Mine and Lorena Processing Plant

### Tick Hill Joint Venture

AuKing, Orion and the current owner of the Tick Hill mine, THM have entered into a joint venture term sheet which creates the basis for an operating joint venture focused on the initial establishment of processing the existing tailings stockpiles at the Tick Hill mine site and then, subject to further studies, potentially re-opening the historical Tick Hill open pit mine. The new term sheet is conditional on the satisfaction of certain key activities namely:

- Orion completing acquisition of Cloncurry Project assets;
- preparation of the feasibility study (see details below) ("FS") that is in a form satisfactory to both Orion and THM; and



- Orion securing project development financing on terms that are satisfactory to both Orion and THM.

Work on the FS will be undertaken by a recognized consulting group. It is proposed to commence immediately and will involve a collaborative effort between representatives of each of AuKing, Orion and THM. The primary elements of the FS will include the following:

- Scope of Work
- Plant specification and Location
- Detailed Engineering Design to meet metallurgical requirements
- Capital and Operating costs budget
- Tailing disposal methods (including dry stacked tailing)
- Environment and legal factors such as approvals, permits, closure plans and bonds
- Investment returns
- Risks/Opportunities
- Project financing structures are also to be finalised and will follow the FS release.



*Figure 3 – Aerial view of the tailings stockpile at Tick Hill (with the open pit just out of view to the right of the image)*

It is estimated that the Tick Hill tailings reprocessing feasibility study will take approximately 3-4 months to be completed. The relatively short timing is based on the assumption that the project requires limited baseline field work and is assisted by earlier studies including the 2020 PFS and available design drawings for the Lorena plant. Critical timelines and pathways to production addressing construction, environmental, social and permitting (plant and tailings storage) will be documented in the FS.

Subject to the parties finalizing the FS and being satisfied with the FS outcomes and recommendations, a formal Tick Hill operating joint venture will commence based on 50/50 participating interests as between Orion and THM.

### Preferred Tick Hill Ore Processing Method

To maximise the returns from the Tick Hill tailings, the joint venture will be focused on processing both at the Tick Hill mine site (with the necessary additional plant installed) and the existing Lorena processing facility near Cloncurry. In summary, subject to completion of the FS, the processing would operate as follows:

**Ore Preparation:** The process begins with grinding the gold-containing tailings into a fine particle size. This increases the surface area, allowing better contact with the leaching solution. The ground ore is then mixed with water to form a slurry.

**Leaching and Adsorption:** The slurry is transferred to a series of tanks where cyanide (usually sodium cyanide) is added. Cyanide dissolves the gold, forming a gold-cyanide complex (aurodicyanide). Simultaneously, activated carbon is introduced into the tanks. The gold-cyanide complex adsorbs onto the surface of the carbon particles, effectively pulling the gold out of the solution as the slurry moves through the tanks. It is expected that the existing tanks at Lorena could be re-located to Tick Hill for this purpose.

**Carbon Separation:** After the leaching and adsorption are complete, the carbon, now loaded with gold, is separated from the slurry using screens or other filtration methods. The barren slurry (with most gold removed) is then treated further.

**Transportation to Lorena:** The gold-loaded carbon material is then transported to Lorena for final processing and refining utilising the existing elution and related circuits at Lorena. Once stripped from the gold, the carbon is regenerated by heating in a kiln to remove residual contaminants, allowing it to be returned to Tick Hill for re-use.

### Independent Preliminary Economic Assessment (PEA)

AuKing has just completed the preparation of an independent PEA which had the primary objective of reviewing the reported outcomes from the 2020 PFS. AuKing is pleased to report that the PEA conclusions remain favourable for the Tick Hill tailings processing, with a recommendation that further studies continue to assess matters such as:

- Confirming the condition of the Lorena plant and update capital estimates to return the plant to operating condition;;
- Assess the transportation access and proposed arrangements as between Tick Hill and Lorena;
- Confirm pricing of key consumables;
- Determine how to establish the required trained and experienced processing workforce at Lorena; and confirm the timing and requirements for approvals processes.



The PEA Report also contained references to potential opportunities that might be available for the joint venture including:

- Additional gold-bearing tailing material at Tick Hill, not included in the 2020 PFS, which is lower grade and may be economic;
- Potential for higher gold grades and/or recoveries than those that have been modelled; and
- Further increases in the gold price.

Finally, the PEA contained recommendations that study work should be undertaken to assess the re-establishment of mining operations at the historical Tick Hill open pit. The independent assessment noted that the higher-grade material extracted from the open pit (as compared to the tailings material) creates a very attractive proposition in terms of potential economic returns but requires a larger investment to support the final investment decision.

**This announcement has been authorised by Paul Williams, Managing Director, AuKing Mining Limited.**

**For more information, please contact:**

Paul Williams

Managing Director

Mobile +61 419 762 487

[p.williams@aukingmining.com](mailto:p.williams@aukingmining.com)