



## ASX ANNOUNCEMENT 16 JUNE 2011

### UPDATE ON DEFINITIVE FEASIBILITY STUDY FOR SIHAYO PUNGKUT GOLD PROJECT

The Board of **Sihayo Gold Limited (ASX: SIH)** is pleased to provide the following update on the progress of the Definitive Feasibility Study (“DFS”) for its 75% owned Sihayo Pungkut Gold Project (“SPGP”) in North Sumatra, Indonesia.

The DFS capital cost estimates are now 98% complete and the operating costs (per tonne of ore basis) are 97% complete. All capital and operating cost estimates have been completed to the required DFS level of accuracy of +/- 10%.

#### HIGHLIGHTS OF DFS RESULTS TO DATE

- **Capital cost of US\$80.4 million plus 10% contingency allowance**
- **Standard Carbon In Leach (“CIL”) processing plant with 1.25Mtpa capacity**
- **Life of Mine (“LOM”) average tonnes processed of 1.2Mtpa**
- **LOM average gold production of 72,000ozpa**
- **Estimated mine life of 7.2 years**
- **LOM average strip ratio of 5.4:1**
- **LOM average gold process recoveries of 70% - 72%**
- **LOM average cash operating costs (including royalties, excluding corporate) of US\$45.40 per tonne of ore processed or US\$752/oz gold produced (power costs based on diesel generation using Tapis oil reference price US\$115/bbl)**

The key components of the capital cost estimate of US\$80.4 million are:

- Owners cost to first gold pour: US\$10.2 million
- 1.25Mtpa CIL Processing Plant: US\$24.2 million
- Infrastructure & Services: US\$39.4 million
- EPCM contract: US\$6.6 million

The key components of the forecast LOM average cash operating costs are:

- Mining costs: US\$20.22 per tonne of ore processed
- Processing costs: US\$20.77 per tonne of ore processed
- Total mine admin plus royalties: US\$4.41 per tonne of ore processed

Current forecast cash operating costs are above the LOM average in the initial years of operation reflecting the combined impact of below average head grades and the flat 70% - 72% gold process recovery estimate.

## ONGOING WORK TO FINALISE THE DFS

The remaining work to fully complete the DFS is focused on the gold process recoveries on a year-by-year basis. Whilst this additional work does not impact capital costs or cash operating costs on a per tonne basis, it does potentially have a significant impact on the derived cash operating costs per ounce of production.

The current estimate of gold process recoveries is based upon three classifications of ore types within the defined mineable resource, namely; oxidised, transitional and primary. The metallurgical test work program confirmed process recovery estimates of 80%, 70% and 60% respectively for the three ore types via a conventional CIL gold processing method. Based on these results an average process recovery of 70% - 72% has been estimated on an annual basis over the expected mine life.

During an independent peer review of the resource model and the metallurgical test work program it was determined that a greater number of ore types are present within the mineable resource and each of these ore types and the associated process recoveries should be defined and included in the overall gold process recovery estimate. As such, the mineable resource will now be classified into approximately eight ore types, the proportion of each ore type will be calculated, the process recovery estimate for each ore type will be validated against the existing metallurgical test work results and a more comprehensive and definitive gold process recovery profile will be derived.

The primary benefit of this additional process recovery work relates to the improved predictability of gold recoveries throughout the entire mine life.

## DFS IMPROVEMENT POSSIBILITIES

There are a number of areas where the results projected in the DFS to date can potentially be improved:

**Mine life estimate** – The current mine life estimate does not include any Inferred Resources. Planned infill drilling at the Sambung deposit is likely to contribute to an increase in overall Indicated Resources and mine life. In addition, drilling along the strike from the current Sihayo pit, to the northwest and southeast, has highlighted potential to substantially increase overall resources.

**Gold process recoveries** – Actual metallurgical test work recoveries of 85% - 95% have been achieved within sections of the more highly oxidised shallow mineralisation at Sihayo. However, based on the existing ore classification parameters, any benefit from above average recoveries in the early years of operation has not been defined. The additional process recovery work may determine that recoveries above the 70% - 72% average are achievable in the early years of operation, however this will only be validated when the additional work is complete.

**Power costs** – Current operating cost estimates reflect the sole use of diesel generated power across the operation. At current Tapis oil prices of US\$115/bbl, power costs are significantly impacted. Work continues on a separate feasibility study for a dedicated hydro power plant of approximately 6MW - 8MW capacity. If the feasibility study is successful this would have a significant positive impact on operating costs in the future. Estimated hydro power costs are approximately 50% lower than current diesel power costs. The hydro feasibility study is forecast to be complete by October 2011.

## SUMMARY OF DFS PARTICIPANTS

Sihayo's Chief Operating Officer, Mr. Greg Entwistle has been responsible for the overall management of the DFS.

Independent consultants have been appointed to complete components of the DFS and each consultant is considered competent in their respective discipline and where applicable has recent experience in Asia. Participants in the DFS include:

<b><i>Runge Limited</i></b>	Geology and JORC compliant resources
<b><i>Ozmet and AMMTEC Ltd</i></b>	Metallurgical test work and management
<b><i>Plant and Infrastructure Engineering (PIE)</i></b>	Process design
<b><i>Contromation Services</i></b>	DFS engineering, infrastructure, capex and opex
<b><i>Minesure Pty Ltd</i></b>	Mine design and schedule
<b><i>GHD Pty Ltd</i></b>	Geotechnical including pit wall design
<b><i>Schlumberger Water Services PtyLtd</i></b>	Hydrogeology and hydrology
<b><i>Golder Associates Pty Ltd</i></b>	Environmental baseline and AMDAL scoping and mine waste dump design

## PROJECT OWNERSHIP AND LOCATION

The Sihayo Pungkut Gold Project ("SPGP") is located in Mandailing Natal, North Sumatra, Indonesia, approximately 200 kilometres southwest of Medan, the capital city of North Sumatra.

The SPGP is held under a seventh generation Contract of Work ("COW"). The COW is a legal contract between the Government of the Republic of Indonesia and PT. Sorikmas Mining (the 75% owned subsidiary of Sihayo Gold Limited).

The COW covers an area of 66,200 hectares and under the terms of the COW this area shall be reduced to approximately 50,000 hectares prior to the commencement of construction activities.

The 25% minority shareholder in PT. Sorikmas Mining is PT. Aneka Tambang Tbk, the majority state owned Indonesian mining company.

## GEOLOGY AND RESOURCE

Independent expert Runge Limited ("Runge") has estimated resources at the Sihayo and Sambung deposits. Details of the JORC Compliant Resource were released on 21st March 2011.

The Indicated Resource at the Sihayo deposit as at March 2011 comprises 13.2Mt at 2.8g/t Au containing 1,195,600 ounces of gold (using a 1.2g/t Au cut-off).

The Inferred Resource at the Sihayo deposit comprises 1.4Mt at 2.3g/t Au containing 106,500 ounces of gold (using a 1.2g/t Au cut-off).

The Inferred Resource at the Sambung deposit has not been considered in the DFS at this stage.

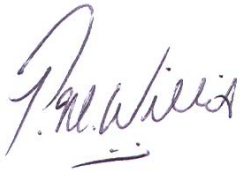
## NEXT STEPS

Our DFS team is focused on completing the outstanding work as quickly as possible.

Aside from the DFS work, exploration drilling continues at the Tambang Tinggi copper/gold prospect, pre-drilling exploration work continues at the Hutabargot Julu epithermal prospect and the re-establishment of the exploration camp at the main Sihayo deposit will commence soon.

Yours faithfully,

**SIHAYO GOLD LIMITED**



**Paul Willis**

Chief Executive Officer

16th June 2011

### **Competent Persons Statements**

**Sihayo Gold Limited:** The information in this report that relates to exploration, mineral resources or ore reserves is based on information compiled by Mr Graham Petersen (BSc.Geol) who is a full time employee of PT Sorikmas Mining(75% owned subsidiary of Sihayo Gold Limited), and is a Member of the AusIMM. Mr Petersen has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a competent person as described by the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Petersen consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

**Runge Limited:** The information in this report that relates to Mineral Resources at Sihayo is based on information compiled by Mr Robert Williams BSc, a Member of the Australian Institute of Mining and Metallurgy, who is a full time employee of Runge Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code of Reporting for Exploration Results, Mineral Resources and Ore Reserves. Mr Williams consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**Modelling:** The Sihayo deposit was estimated by Runge Limited using Ordinary Kriging grade interpolation, constrained by mineralisation envelopes prepared using a nominal 0.5g/t gold cut-off grade for the lower grade upper weathered zone, and 1.0g/t Au in the deeper higher grade zones. In all cases a minimum downhole intercept length of 2m was adopted. The block dimensions used in the model were 25m EW by 10m NS by 5m vertical with sub-cells of 6.25m by 2.5m by 1.25m. Statistical analysis of the deposit determined that no high grade cuts were required in the estimate. Grades were estimated using Ordinary Kriging. Bulk density was assigned in the model based upon the results of 4,629 bulk density determinations.

### **NOTE**

All statements in this report, other than statements of historical facts that address future timings, activities, events and developments that the Company expects, are forward looking statements. Although Sihayo Gold Limited, its subsidiaries, officers and consultants believe the expectations expressed in such forward looking statements are based on reasonable expectations, investors are cautioned that such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward looking statements. Factors that could cause actual results to differ materially from forward looking statements include, amongst other things commodity prices, continued availability of capital and financing, timing and receipt of environmental and other regulatory approvals, and general economic, market or business conditions.