

# ASX ANNOUNCEMENT

## 20 November 2023

ASX: SU\

# SUVO TO COMMENCE TEST WORK ON CALCINED KAOLIN

# HIGHLIGHTS

Aaron Banks

- German thermal processing specialists, IBU-tec Advanced Materials AG ("IBU-tec"), engaged to calcine Pittong hydrous kaolin, producing calcined kaolin.
- Lab scale testing initiated following significant demand from existing Asia Pacific customers and distributors that already purchase Pittong hydrous kaolin.
- Current Australian customers of Suvo import ~10,000 tonnes per annum of calcined kaolin.
- Calcined kaolin is sold in the Asia Pacific market at a ~20% to ~40% price premium compared to Suvo's current weighted average selling price.
- Using an electrically heated muffle furnace, the lab scale trial will run at different temperatures and residence times to produce the optimal reference sample.
- Subject to successful lab-scale trials, upscaling and production of a 25kg batch sample is planned to allow 1kg samples to be distributed to the abovementioned customers for testing and product evaluation.

Suvo Strategic Minerals Limited (ASX: SUV) ("Suvo" or "the Company") is pleased to announce that following significant demand from the Company's existing Asia Pacific customers and distributors, it has engaged German thermal processing specialists IBU-tec Advanced Materials AG ("IBU-tec"), to complete lab scale testing utilizing the Company's Pittong hydrous kaolin with the aim of successfully producing calcined kaolin.

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NON-EXECUTIVE CHAIRMAN NON-EXECUTIVE DIRECTOR NON-EXECUTIVE DIRECTOR Suvo Strategic Minerals Ltd. ABN 97 140 316 463 Head Office: Level 11, 40 The Esplanade, Perth, Western Australia 6000 Operations: 3610 Glenelg Highway, Pittong, Victoria 3360

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The Company's existing customers in Australia, which purchase Pittong hydrous kaolin, currently import ~10,000 tonnes per annum of calcined kaolin. The market in Asia is significantly larger with consumption in the hundreds of thousands of tonnes.

The lab scale trials, using an electrically heated muffle furnace and Pittong hydrous kaolin as the material, will run at different temperatures and residence times to produce the optimal calcined kaolin reference sample.

Subject to successful results from the lab scale trial, upscaling and production of a 25kg batch sample is planned, allowing Suvo to distribute 1kg samples to customers for testing and product evaluation. The Company expects to complete lab scale test works by the end of Q1 CY 2024, and if successful, product samples can be distributed to end users.

The Company's focus remains on selling its Pittong hydrous kaolin to existing traditional markets such as the paper, paint, rubber, adhesives and pharmaceuticals markets. However, Suvo continues to evaluate ways it can increase the weighted average sales price of its product basket, and calcined kaolin is certainly appealing given there is currently no production within Australia.

## Interim Chief Executive Officer Bojan Bogunovic commented:

"We are pleased to start this test work with our hydrous kaolin from Pittong to produce a calcined kaolin product which trades at a price premium compared to our current weighted average selling price.

We remain focused on selling the Pittong hydrous kaolin to traditional markets and investing future cashflows generated into product development opportunities which will yield even better results for the Company and our shareholders.

With no onshore production of calcined kaolin there is an opportunity for Suvo to extend its product offering to its valued customers in Australia and overseas.

Much like the cement industry, the production of calcined kaolin globally is a high emitting process with firing temperatures of approximately 1050°C. Suvo is focused on producing a greener product using an electrically heated calciner."

## Approved for release by the Board

-ENDS-





# Technical information on Calcined Kaolin

Calcined kaolin is produced when hydrous kaolin is fired at high temperatures (approximately 1050°C) via a process known as 'calcination' which is most commonly performed in a cement like kiln also known as a 'calciner'.

The practical definition of calcination is heating kaolin until all its free water evaporates and all organic contamination is burned off.

The calcining process causes the kaolin structure to collapse and become denser, which improves its opacity and its whiteness.

In the paper industry, opacity is a property that refers to how translucent or see through a sheet of paper is. A high opacity means that the paper is not very seethrough and it is easy to read print on the page without the distractions of marking from the other side showing through.

In the paint industry, calcined kaolin improves tinting strength which refers to how much a colour is altered with the addition of another colour. The higher the tinting strength of a colour, the more resistant it will be to a change in colour with the addition of another colour. Paints with finely ground and high-quality pigments have a high tinting strength.

Calcined kaolin also provides a number of other benefits in the ceramics, rubber and plastics industries.

Calcined kaolin should not be mistaken with metakaolin which is widely used to reduce emissions in the cement and concrete industry. Metakaolin is also fired at high temperatures (approximately 700°C) and sold into the concrete industry, whilst calcined kaolin is fired at even higher temperatures (approximately 1050°C) and sold into traditional kaolin markets such as paper, paint, rubber, plastics and ceramics.

## For further information, please contact

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#### **Company Profile**

Suvo Strategic Minerals Limited is an Australian hydrous kaolin producer and exploration company listed on the Australian Securities Exchange (ASX:SUV). Suvo is focused on production at, and expansion of, their 100% owned Pittong hydrous kaolin operation located 40km west of Ballarat in Victoria. Suvo's exploration focus is on near-term kaolin and high purity silica assets with 100% owned Gabbin (kaolin), Eneabba and Muchea (silica sands) projects located in Western Australia.

#### **Pittong Operations**

The 100% owned Pittong Operations, located in Victoria 40km west of Ballarat, is the sole wet kaolin mine and processing plant in Australia and has been in operation since 1972. Pittong comprises the Pittong, Trawalla and Lal Lal deposits located on approved Mining Licences MIN5408, MIN5365 and MIN5409 respectively.

At Pittong mining contractors deliver crude kaolin ore to stockpiles from the two currently operating mines, Pittong and Lal Lal. The plant takes its feedstock from the ROM and it is processed into four separate product forms for end users. These product forms are 10% moisture lump, high solids slurry, 1% moisture powder and 1% moisture pulverised powder. The solids slurry is used in paper and board manufacturing. The other products are used in paper, coatings, paint and specialist industries including rubber and pharmaceutical applications. Around 20–25kt per annum is supplied to various end users.

### **Gabbin Kaolin Project**

The 100% owned Gabbin Kaolin Project (White Cloud) is located 215km northeast of Perth, Western Australia. The project area comprises four granted exploration licences (E70/5039, E70/5332, E70/5333, E70/5517) for 413km<sup>2</sup>, centred around the town and rail siding of Gabbin. The generally flat area is primarily cleared farming land devoid of native bushland and is currently used for broad-acre cereal cropping. A mining access agreement is in place over the current resource area with the landowner and occupier.

The main rock types at Gabbin are primarily Archaean granite, gneiss, and migmatite. These rocks are overlain and obscured by Tertiary sand and Quaternary sheetwash. The weathering profile is very deep and contains thick kaolin horizons capped by mottled clays or laterite zones. The current JORC 2012 Mineral Resources are 72.5Mt of bright white kaolinised granite with an ISO Brightness of 80.5%.

### Eneabba Silica Sands Project

The 100% owned Eneabba Silica Sands Project is located 300km north of Perth, Western Australia. The project comprises four granted exploration licences (E70/5001, E70/5322, E70/5323, E70/5324) for 169km<sup>2</sup>. The project is located on the Eneabba Plain whose sandy cover is very flat to gently undulating. Outcrop is rare due to the accumulations of windblown and alluvial sand at surface. Below this is a thin hard silcrete or lateritic claypan which overlies deep white and yellow sands.