

AMMG SIGNS OPTION AGREEMENT TO ACQUIRE AN EXCLUSIVE LICENCE FOR PROCESSING KAOLIN TO ALUMINA

HIGHLIGHTS

- **Chinese technology owner grants AMMG a 5-year option to acquire the exclusive unconstrained Australia-wide technology licence for the processing of kaolin or aluminous clay to alumina via an acid-based technology process.**
- **Technology owner, Professor Shang, is a Senior Chemical Engineer and Associate Professor of chemistry based in Southern China.**
- **Professor Shang has successfully produced samples of 86 grams of 99.99% high purity alumina and 1.06 kilograms of 99% smelter grade alumina from AMMG's Meckering kaolin using a unique technology process.**

Australia Minerals and Mining Group Limited (**ASX: AKA**) ("**AMMG**" or "**the Company**"), is pleased to announce that it has signed an option agreement to acquire an exclusive Australia-wide technology licence for the processing of kaolin or aluminous clay to alumina. The option agreement is for a period of five years with remuneration terms yet to be agreed.

The owner of the technology process, Professor Shang, has previously successfully produced 86 grams of 99.99% high purity alumina and 1.06 kilograms of smelter grade alumina from AMMG's Meckering Kaolin Project. Professor Shang developed a unique kaolin to alumina technology via an acid-based process, whereby the separation of silica from the kaolin leaves between 99-99.99% alumina (see [ASX announcement 06/09/2011](#)). The results of this testing are detailed in Table 1 below.

Professor Shang has worked in China for the last 21 years researching advanced kaolin processing techniques. Professor Shang's earlier work includes researching kaolin-based oil refining additives for industrial production, pilot plant research and kaolin research for catalytic convertor technology.

Following the execution of the option agreement, AMMG will continue to work closely with Professor Shang towards advancing and tailoring the unique technology process to the specific attributes of AMMG's particular kaolin material, which has relatively high alumina and low impurity levels.



	Smelter Grade Alumina (Al₂O₃)	High purity Alumina (Al₂O₃)
Experimental water	Industrial and decationised water (third grade)	Decationised water (third grade)
Sample Weight	1065g	85g
Ignition loss	<1 wt%	<1 wt%
Purity, Al₂O₃	>99 wt%	>99.99 wt%
Crystal Form (XRD)	Alpha (α)	Alpha (α)
Impurities, Fe₂O₃	<0.02 wt%	<30ppm
Impurities, SiO₂	<0.05 wt%	<45ppm
Impurities, Na₂O	0.02 wt%	<25ppm

Table 1: Professor Shang's test results of alumina prepared from AMMG's Meckering Project



Fig 1: Professor Shang and AMMG Managing Director Ric Dawson inspecting the laboratory in China where the unique kaolin to alumina technology process takes place

Next Steps

Professor Shang is scheduled to relocate into a new kaolin laboratory testing facility early next year (refer Fig 2 below).

It is anticipated that early next year additional samples of AMMG's kaolin will undergo further testing through a "scaled" pilot plant, which will be a continuous process rather than the batch laboratory process previously used. This will enable AMMG to evaluate the attributes and cost benefits of the technology process prior to any pilot plant studies or exercise of the option under the option agreement. It is anticipated that the results from this continuous process could be available over the coming year.

Under the terms of the option agreement, the Company is free to advance its own processing technologies and explore other potential licensing opportunities. However, at this stage of the Company's development, the utilisation of the Chinese technology is seen as a potential means to expedite the Company's growth and development plans.



Fig 2: Professor Shang and AMMG personnel in front of the nearly completed premises where the kaolin to alumina facility will be housed

ENDS

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About AMMG

Australian diversified resources company, AMMG, listed on the ASX in January 2010. The Company was established for the purpose of securing exploration ground over areas that have typically been subject to historical exploration and where significant geological data was available and/or the land was considered sufficiently prospective. Areas with existing or potential access to infrastructure were also targeted.

To date, the Company has identified project areas located in Western Australia and Queensland, which the board believes may have the potential for the realisation of economic resources of these commodities currently targeted - iron ore, kaolin, coal, gypsum, mineral sands and salt.

The Company has 12 granted tenements and 53 applications for tenements covering approximately 11,213 km² over its project areas.

