
ADDITIONAL STRONG CEMENT RESULTS FROM SAMPLE TESTED IN CHINA

23 March 2015, Sydney Australia: Latrobe Magnesium Limited (ASX:LMG) has achieved further progress in the first of its large-scale concrete trials on the supplementary cementitious material (SCM) from its recently processed China sample.

The SCM is being targeted as a commercial by-product of LMG's process of extracting magnesium from large volumes of spent fly ash in Victoria's Latrobe Valley.

The LMG cementitious material appears to behave like a conventional pozzolan, lagging the pure GP cement mix over the first 7 days, but by 14 days has essentially caught up in compressive strength and surpassed the conventional fly ash mix in strength development at 28 days.

Unconfined Compressive Strength Results:

Age (days)	Pure GP cement mix	Fly Ash mix	LMG Residues Mix
7	43.5 MPa	34.5 MPa	35.0 MPa
14	48.2 MPa	43.2 MPa	47.0 MPa
28	52.5 MPa	50.7 MPa	52.7 MPa

LMG produces over 8 tonnes of SCM for every tonne of magnesium produced.

The price of its SCM will be set somewhere between the cost of fly ash and the cost of cement delivered in Melbourne. These costs are between \$120-180 per tonne. The revenue generated by this product significantly enhances the value of the Latrobe Magnesium project.

LMG's SCM is produced without emitting any CO². Cement traditionally produces up to 0.9 tonnes of CO² per tonne of cement.

Therefore, there are major cost benefits and environmental benefits when LMG's SCM is mixed with normal portland cement.

The above performance has been achieved using a 30% mixture of LMG's SCM with portland cement. Future tests will look at increasing LMG's SCM component to increase these benefits.

This first test will continue for another 28 days so that the durability of LMG's SCM can also be determined.



David Paterson
Executive Chairman

About Latrobe Magnesium

Latrobe Magnesium is developing a magnesium production plant in Victoria's Latrobe Valley using its world-first patented extraction process. LMG intends to extract and sell magnesium metal and cementitious material from industrial fly ash, which is currently a waste stream from brown coal power generation.

LMG has completed a pre-feasibility and an adjustment study validating its combined hydromet / thermal reduction process that extracts the metal. Production from its initial 5,000 tonne per annum magnesium plant is due to start at the end of 2016. The plant will be in the heart of Victoria's coal power generation precinct, providing immediate access to feedstock.

LMG plans to sell the refined magnesium under long-term contracts to Australian and American users. Currently, Australia imports 100% of the 10,000 tonnes annually consumed.

Magnesium has the best strength-to-weight ratio of all common structural metals and is increasingly used in the manufacture of car parts, laptop computers, mobile phones and power tools.

The LMG project is at the forefront of environmental benefit – by recycling power plant waste, avoiding landfill and is a low CO₂ emitter.