
LMG's PLANT APPROVED BY LATROBE CITY COUNCIL and GHD REPORTS

9 June 2020, Sydney Australia: On 5 June 2020, Latrobe Magnesium Limited's (ASX:LMG) application to the Latrobe City Council for planning approval to use and develop the site for its initial 3,000 tpa magnesium plant at 320 Tramway Road Hazelwood North was approved and a certificate issued.

LMG remains committed to progressing this project to safely re-process mining waste, generating jobs and developing a new industry in the Latrobe Valley.

LMG held a community briefing in Traralgon in December 2019 where it released its calculations of expected traffic movements and CO₂ emissions. The Company committed to publicly releasing the results of further studies by its consultants, GHD. Due to COVID-19 restrictions on public gatherings, LMG cannot hold further public meetings at this time. LMG will place an advertisement in the Latrobe Express noting where project information can be accessed and questions answered, including further study results.

In January 2020, GHD was engaged to undertake:

- an operational noise assessment;
- preparation of an air emissions report;
- an energy and greenhouse gas emissions assessment; and
- preparation of a traffic report.

These studies were based on the information supplied to GHD by Latrobe Magnesium's engineers and others and the results of these studies, summarised below, assume that the information is complete and correct:

Noise Report

This report considers the potential noise impacts of the type and scale of the proposed facility within the general area of Tramway Road and surrounding community. The report assesses potential noise impacts against relevant Victoria noise guidelines, legislation and policy, in particular EPA's *Noise for Industry in Regional Victoria* guidelines. As part of these studies, GHD undertook unattended noise monitoring and attended measurements at the nearest noise sensitive receiver.

GHD found that "results of the noise impact predictions show that operational noise from the site is expected to comply with applicable noise criteria."

Air Emissions Report

This report includes an assessment of the likely emissions to air from the facility and ground level concentration (GLC) impacts within the surrounding area. Air dispersion modelling was used to assess the incremental impact (applying emissions from the LMG plant alone) and the cumulative impact (applying emissions from both the LMG plant and ambient (background) concentrations of pollutants on GLCs within a 6 km radius of the proposed plant.

GHD used the Victorian EPA regulatory air dispersion model, AERMOD, to assess the likely air quality impacts. Dispersion modelling was conducted for each of the five years 2013 to 2017, using meteorological data files prepared in accordance with EPA guidelines.

GHD considers “the LMG plant to be of low risk to human health given the low incremental results in regard to the SEPP AQM [State Environment Protection Policy Air Quality Management] and the low relative increase in particulates compared with the existing ambient environment”.

“The likelihood of exposure to emissions from the LMG plant is low due to the location of the LMG plant and the rapid decline in pollutant concentrations with distance from the maximum GLC”

Energy Use and Greenhouse Gas Emissions (GHG) Assessment

LMG also commissioned an energy and greenhouse gas assessment of the proposed facility. There are three major sources of quantifiable GHG emissions; combustion of stationary fuels, combustion of transport fuels and the consumption of electricity. The Table below provides a summary of emissions from these three sources.

Summary of GHG emissions

Emission Source	t CO ₂ -e / Tonne of Mg	t CO ₂ -e / year
Stationary energy emissions	11.39	34,190
Transport emissions	0.02	52.5
Consumption of electricity	3.89	11,681

At the 2019 community briefing, LMG’s estimated direct CO₂ emissions was in the order of 10 tonnes per tonne of magnesium produced. This has increased slightly due to increased energy usage in the latest production flowsheet.

In summary, the magnesium plant is estimated to emit up to 34,190 tonnes of CO₂ per annum. In contrast, the three existing Latrobe Valley power stations emit in excess of 50 million tonnes of CO₂ per annum. Furthermore, the lifecycle impacts of use of lightweight magnesium metals, e.g. in cars, will decrease net greenhouse gas emissions.

Traffic Report

GHD reviewed the potential traffic impact of the proposed magnesium plant at Tramway Road. There will be 14 truck deliveries on weekdays, with the largest vehicle being a 26 metre long B-Double, comprising:

- 4 trucks from Yallourn power station
- 2 trucks from Melbourne
- 3 trucks travelling to Melbourne, and
- 4 trucks travelling to local destinations.

This is the same number of truck traffic movements as estimated by LMG at the December 2019 community briefing.

GHD concluded:

- the proposed on-site car parking provision is appropriate;
- the proposed bicycle parking provision exceeds planning scheme requirements;
- the proposed car park design meets planning scheme requirements with satisfactory access;
- the proposed hard stand area for trucks can accommodate vehicles of up to B-Double size;
- additional traffic generated by the development is predicted to be up to 59 vehicle movements in the AM and PM peak times, including 55 movements by staff and 4 movements by trucks;
- analysis shows that this traffic volume can be accommodated by the surrounding road network.

Overall, the proposed magnesium plant is not expected to create adverse traffic or parking impacts in the area.

Summary

Now LMG's planning application has been awarded by the Latrobe City Council, LMG can lodge its Research, Development and Demonstration application with the EPA. Under the law, EPA has 30 days to respond to this application.

Extracts from these GHD reports will be posted on LMG's website. Should a member of the public have any queries in relation to this information, please do not hesitate to contact me on mobile: 0421 234 688 or by email: dopaterson@latrobemagnesium.com.



David Paterson
Chief Executive Officer

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 the Yallourn brown coal power generation.

LMG has completed a feasibility study validating its combined hydromet / thermal reduction process that extracts the metal. Construction is estimated to start on its initial 3,000 tonne per annum magnesium plant in July 2020 with production commencing up to 18 months later. The plant will then be expanded to 40,000 tonne per annum magnesium 12 months later. The plant will be in the heart of Victoria's coal power generation precinct, providing immediate access to feedstock, infrastructure and labour.

LMG plans to sell the refined magnesium under long-term contracts to Australian, USA and Japanese customers. Currently, Australia imports 100% of the 8,000 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. LMG adopts the principles of an industrial ecology system.