

ASX Announcement 30 October 2018

## Bass commences Study for an Expandable Graphite Plant.

Bass Metals Limited (ASX: "BSM") ("Bass" or the "Company") is pleased to announce the Company is progressing a study for the construction of an Expandable Graphite Plant, as it continues to deliver its strategy for material growth as a producer of high value industrial mineral concentrates.

Dorfner Anzaplan GmbH ("Anzaplan"), a leading German Industrial Engineering team, having been engaged by Bass to complete the study, will work with Bass' internal projects team to develop a construction and operations plan for the downstream processing of large flake concentrates produced from the Company's 100% owned, debt free Graphmada Mine.

The study will focus on a proportion of the Company's expansion of production to supply the Expandable Graphite Plant, which mixes Graphmada's predominantly large flake graphite with an intercalation agent, followed by filtration, washing and neutralization for drying, screening and bagging.

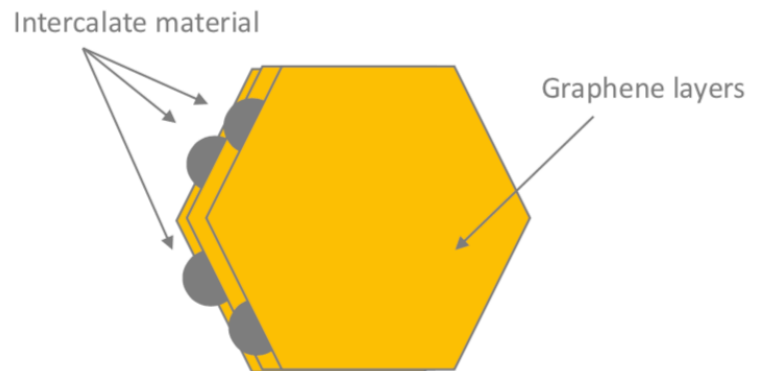


### ABOUT EXPANDABLE GRAPHITE

Expandable graphite is a form of intercalated graphite and belongs to a group of products often referred to as 'intumescent'. Expandable graphite is produced by a process in which an intercalant material is inserted in between the graphene

layers of flake graphite in a process of 'exfoliation'. When this intercalated material is heated it causes the intercalant material to expand and drive the graphene layers of the graphite apart.

The feedstock for expandable graphite is typically large flake graphite with particle size distribution >150 microns. The final carbon content of this expanded material is very high at up to 99.9%C and demands significant price premiums of US\$2,500 to US\$4,000 per tonne.



Around 40% of expandable graphite production is processed into fire retardants, the single biggest end market for expandable graphite. The remaining 60% is processed into flexible graphite which is the precursor to a number of end-products.

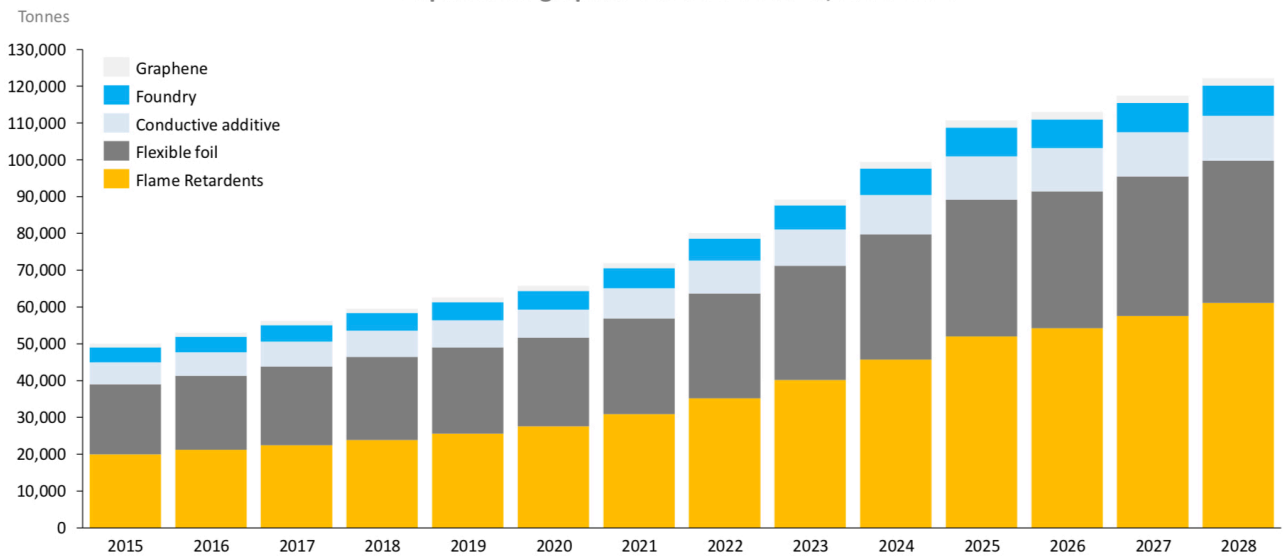
The applications for expandable graphite arise from its chemical stability, non-toxicity, and ability to expand in a consistent way when exposed to heat. In flame retardants expandable graphite creates a protective layer that protects a given material from fire for an extended period. Oxygen is also withdrawn from the air during expansion, making the air inert.

Consequently, expandable graphite has many applications in the construction industry, and also in furniture and textiles, and anywhere where there is a pronounced fire risk.

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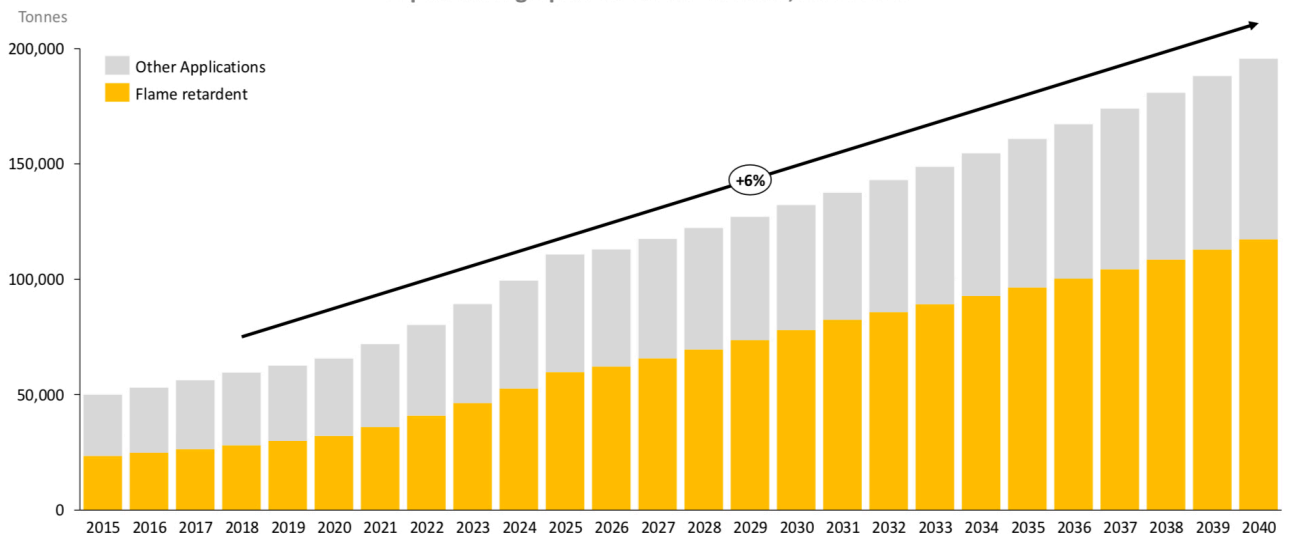
Benchmark Minerals, a leading graphite market analyst group, estimates that the market for expandable graphite at present stands at roughly 60,000 tonnes per annum, around 40% of which is for use in fire retardants. They forecast expandable graphite to exceed industrial and GDP growth forecasts in the coming years as fire safety regulations become more stringent in all major economies, with fire retardants to grow in market share by this same dynamic.

Expandable graphite demand forecast, 2015-2028



BENCHMARK MINERAL INTELLIGENCE – BASS METALS LTD – JULY 2018

Expandable graphite demand forecast, 2015-2040



BENCHMARK MINERAL INTELLIGENCE – BASS METALS LTD – JULY 2018

## EXECUTIVE DIRECTOR MR PETER WRIGHT:

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“As a Natural Flake Graphite producer, the move into the production of expandable graphite and end product manufacture is a natural step in adding value for our shareholders.

The expandable graphite sector not only offers strong growth, largely driven by a rise in demand from the construction industry and in consumer electronic equipment, but a significant and sustainable increase in realisable value for the Company from its asset base.

We eagerly anticipate the results of the study from our team and Anzaplan, whom originally completed the initial test work on the suitability of our concentrates for expandable markets and look forward to updating the market in the near future with the results.”

For more information, please contact:

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## Competent Person Statement

The information in this document that relates to Exploration Results is based on information compiled by Tim McManus, a Competent Person who is a member of the Australasian Institute of Mining and Metallurgy and a full-time employee of the Company.

Tim McManus has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Tim McManus consents to the inclusion of the information in this document in the form and context in which it appears.