

22 June 2017

Palaris Australia Pty Ltd is an International mining advisory firm (www.palaris.com). We are Australian owned and operated, have been in business for some 17 years and have provided services in more than 27 countries across 15 different commodity types. We employ geologists, mining engineers, environmental scientists, financial analysts, mechanical engineers, electrical engineers, risk management specialists, operations specialists and project managers. We provide independent technical/financial advice on most aspects of mining and our business undertakes project assessment at all stages of project development. There are very few coal mining projects (underground or open cut) in Australia we have not provided services for at some time. Additionally we have advised on coal projects in Indonesia, Vietnam, China, New Zealand, South Korea, Russia, Turkey, Mozambique, Poland, United Kingdom, USA, Canada, Italy, Czech Republic, Bosnia, Iran and South Africa.

We are very proud to continue to act as Principal Advisor to Hume Coal (Hume), for whom we have acted over the past two and half years. Our commission has been to work closely with the Hume team, focus on understanding the geology and surrounding environment and to develop mine plans which have very minimal impact on the highly sensitive area where the mine is planned to operate. Our team has worked assiduously in assessing all of the known mining techniques which maybe applicable for mining as well as the development of variants to known techniques modified specifically to cater for the expected requirements of the proposed mine. The process of development and assessment of options (technically and financially) is a normal part of International Good Practice for the assessment and optimisation of any mining project.

In our view Hume has been particularly cognisant of the issues associated with this project. This is evidenced by the many of options and permutations we have studied since our involvement with the project. Palaris can confidently advise that we have not worked on a project where more assessment on options has been undertaken in response to the requirements raised by Hume than any other project we have worked on. There are several important aspects of this project which reflect the commitment taken by Hume to protect the environment, including: the first-workings-only mine design; the underground emplacement of coal rejects; and the compartmentalisation and progressive sealing of the mine. Combined, these measures ensure the minimum possible impacts on groundwater, and negligible subsidence. The use of an underground mining also is also important in minimising the surface effects including noise, dust, surface disturbance and the final rehabilitation of the site when operations cease when compared to an open cut mine.

Hume has not just focussed on the direct mining impacts it has also been concerned with the transport of product to market and need to do that in a manner that minimises safety and environmental impacts. To that end the company has undertaken a very detailed study of rail

pathing (including a commitment to covered wagons) as a superior option to trucking. The rail option is again a demonstration of a longer term commitment to the area and the successful development of this project in a manner which totally minimises impact.

The recent NSW budget forecasts a total mining royalty revenue for the state of some \$6.3billion over the next 4 years – this represents around 80% of our budget surplus for NSW. The development of Hume will result in an important contribution to that income for the general benefit of all our community funding of key areas including health, education, roads etc. This does not take into account the significant financial benefit which will be contributed to the community through the direct employment of many people and the use of local service providers which I am very confident will be foremost in the mind of Hume.

In closing Palaris would like to affirm our strong support for this project, not because of our involvement (i.e. that we get paid for our services) but rather because we have a deep understanding of the effort which has been expended to assess and develop this mine plan. A high priority has been given to the legitimate concerns of the community. The response has been a strong desire to develop a mine that minimises its environmental footprint. The key outcome is a final design which will have the lowest impact of any mine plan Palaris has worked on. Importantly it is indisputable that there will be very significant contribution from this project to our community over the life of the project. Finally the Hume team has continually demonstrated to Palaris that they have a deep and ongoing commitment to continually look for ways and means to make this a better project and we have absolute confidence this commitment will continue.



John Pala

Managing Director