

### MANTLE AND EXERGEN RECONFIRM COMMITMENT TO JOINT VENTURE

## **ASX ANNOUNCEMENT**

**23 DECEMBER 2014** 

Mantle Mining Corporation Limited (ASX: MNM) is pleased to advise of an ongoing and mutual recommitment to its Joint Venture Agreement with clean coal technology group Exergen Pty Ltd.

# **Highlights:**

Mantle and Exergen executed a Joint Venture Agreement on 30 June 2012. The JVA included two key milestones; that within 24 months Exergen was to commence construction of a Pre-Commercial Demonstration Plant (PCDP) intended to prove its patented Continuous Hydro-Thermal Dewatering technology (CHTD) at commercial scale and that within 48 months the PCDP was to be constructed and have commenced operation. Exergen is responsible for 100% of the PCDP funding.

The terms of the JVA further allowed that should either milestone not be met that Mantle could give Exergen a Notice to Perform that obligation and that in the event that the obligations were subsequently still not met that Mantle could either acquire Exergen's JV interest at a 50% discount to Exergen's share of JV expenditure to date, or that Mantle could dilute Exergen's JV equity interest by 50%. On 2 October 2014, Mantle announced that it had provided Exergen with a Notice to Perform the first milestone under the JVA.

Following further discussion with Exergen in relation to its commercialisation strategy, and noting general industry wide delays in development of the brown coal upgrade sector that have been out of the control of Exergen, Mantle has determined that it is in the best interests of both companies to continue with the current 50/50% Joint Venture structure.

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### **About Mantle Mining Corporation Limited**

Mantle Mining (ASX: MNM) is an Australian based minerals exploration and mine development company. Mantle's principal activities are to acquire exploration tenements and locate economically developable deposits of coal and gold. It is Mantle's intention to progress mineral deposits through feasibility and into mining operations, to the benefit of all stakeholders.

## **Background:**

Mantle and Exergen are partners in a 50/50% Joint Venture to upgrade and commercialise the Bacchus Marsh brown coal deposit (MNM ASX Release 2 July 2012). The JV covers Exploration Licences 5294 and 5323, located to the west of Melbourne (Figure 1). The ELs contain a 1.6 billion tonne Inferred Resource of brown coal (MNM ASX Release 15 August 2012) (Figure 2).

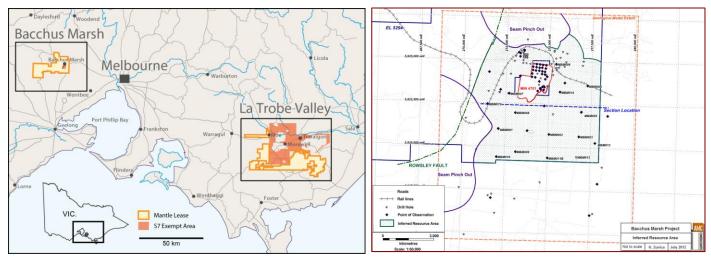


Figure 1: Mantle's Victorian coal project locations.

Figure 2: Inferred coal resource area.

The Inferred Resource calculation was prepared and first disclosed under the 2004 JORC Code. It has not been updated since to comply with the 2012 JORC Code on the basis that the information has not materially changed since it was last reported.

Exergen's CHTD technology transforms low grade, high moisture brown coal into cleaner burning products with lower carbon dioxide emissions. CHTD has been proven at pilot scale and Exergen's current focus is to prove CHTD at commercial scale by developing a \$50 million Pre-Commercial Demonstration Project. Mantle is not required to commit funding to the PCDP.

CHTD slurry would be pumped through a pipeline to a processing facility adjacent to a port location, where it will be dewatered and further processed into valuable domestic and export products such as thermal coal products, char, fertilisers, pyrolysis oils and liquid fuels. Such liquid fuels can be used to feed Direct Injection Coal Engines (DICE) and preferred pipeline routes from the Latrobe Valley to the Port of Hastings and from Bacchus Marsh to the Port of Geelong have been defined.

While Exergen can bring value to a number of downstream uses for upgraded brown coal, collaborations with other proponents in the brown coal upgrading sector are being sought to reduce process risk and development costs and expand product market potential for all parties. Exergen continues to generate a high level of interest in this strategy due to its unique position as a low cost solution to front-end dewatering, coal upgrading and overland transportation.