



Pure Minerals Limited

**17 May 2019**

**ASX Announcement**

## **Lycopodium Appointed as Lead Engineer for Pre-Feasibility Study**

### **Highlights**

- **Queensland Pacific Metals Pty Ltd has appointed Lycopodium as the Lead Engineering Company to undertake the Pre-Feasibility Study for its planned 600ktpa battery materials refinery in Townsville**
- **The project has been named Townsville Energy Chemicals Hub, representative of the goal to produce chemicals (nickel and cobalt sulphate) required for the emerging battery energy storage sector**
- **Lycopodium is a highly regarded engineering company and has been very active in the battery metals space, having undertaken a wide range of studies for projects involving nickel, cobalt, lithium and graphite**
- **Lycopodium has previously completed an engineering study for Direct Nickel Pty Ltd in relation to a processing plant utilising the DNi Process™**

Pure Minerals Limited (ASX:PM1) ("**PM1**" or "**the Company**") is pleased to announce that its wholly owned subsidiary, Queensland Pacific Metals Pty Ltd's ("**QPM**"), has appointed Lycopodium Minerals Pty Ltd ("**Lycopodium**"), a wholly owned subsidiary of ASX listed Lycopodium Ltd (ASX:LYL), as Lead Engineer for the Pre-Feasibility Study for the Townsville Energy Chemicals Hub ("**TECH Project**").

### **TECH Project Launch**

With the acquisition of QPM being approved by shareholders and in the process of being finalised, PM1 is excited to launch its planned battery materials refinery as the Townsville Energy Chemicals Hub. The TECH Project will produce nickel and cobalt sulphate chemicals required for the battery energy storage sector.

QPM will immediately commence the Pre-Feasibility Study ("**PFS**") for the TECH Project, a 600ktpa battery materials refinery producing approximately 25,000tpa of nickel sulphate and 3,000tpa of cobalt sulphate and other valuable co-products.

## Engineering

The key work package for the PFS is the engineering relating to the TECH Project. A competitive tender process was run by QPM, resulting in the appointment of Lycopodium as Lead Engineer.

Lycopodium is a highly regarded engineering company with excellent experience applicable to the TECH Project:

- Highly active in the battery metals space, having undertaken many feasibility studies for clients in nickel, cobalt, lithium and graphite;
- Completed a feasibility study for Direct Nickel Projects Pty Ltd for a nominal processing plant utilising the DNi Process™, which the TECH Project will be utilising; and
- Completed feasibility studies for other nickel projects incorporating downstream processing to produce battery chemicals including BHP's Nickel West project and Cleanteq's Sunrise project.

The key responsibilities for Lycopodium under its contract with QPM are:

- Process, process services and utilities design and engineering
- Preparation of project capital and operating cost estimates
- Compilation of the PFS report, including integration of studies relating to other work packages

Lycopodium has also agreed to accept shares in PM1 as consideration for approximately 20% of its estimated fees, demonstrating Lycopodium's belief in the TECH Project.

The PFS is expected to be completed in the September quarter of 2019.

Lycopodium Minerals Managing Director Rod Leonard commented:

*"We are pleased to have been appointed to complete the key engineering work packages for the TECH Project Pre-Feasibility Study. The outlook for battery metals is positive and Lycopodium is well positioned to carry out this body of work, having completed a wide range of studies for major, mid-tier and junior clients in this space."*

QPM Director John Downie commented:

*"We are excited to work with Lycopodium on this PFS and look forward to delivering a positive study demonstrating the potential value of the TECH Project for PM1 shareholders."*

## Further information:

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