

**ASX Announcement 28 February 2018** 

# **Ngualla Project Update – SML Application**

# **SML Application status**

Peak Resources Limited (ASX: **PEK**) ("**Peak**" or the "**Company**") is pleased to provide an update on the Special Mining Licence ("**SML**") application for the Ngualla Rare Earth mine and multi-stage processing plant in Tanzania.

# **Highlights:**

- Tanzanian officials confirm the **Mining Commission** to be formed within 4 weeks.
- Mining licence applications to be fast tracked upon the formation of the commission.
- Peak's licence application considered a priority for approval.
- Peak has commenced direct technical discussions with the Ministry and government stakeholders.

The SML application was lodged with the Ministry of Minerals in August 2017 (ASX Announcement 6 September 2017 titled "Peak Lodges Special Mining Licence application for Ngualla"). Due to changes in the Tanzanian legislation surrounding all mining activities in the country (ASX Announcement 31 July 2017 titled "Tanzanian Legislative Changes") the SML application is yet to be considered by the government. The delay has primarily been caused by the need to wait for the establishment of the government's new Mining Commission. The new commission has been given powers under the new legislation to consider all new mining and special mining licence applications. At a meeting in Dodoma with Peak on 14 February 2018 the Commissioner for Minerals, Prof. Manya stated that under direction from the President the Mining Commission will be established within one month.

During the hiatus period with no commission in place, Peak has continued direct communications with the government including with the new Minister for Minerals Angellah Kairuki, the two deputy Ministers for Minerals; Hon. Stanslaus H. Nyongo and Hon. Dotto Biteko, and the Commissioner of Minerals Prof. Shukuruni Elisha Manya.

The Deputy Minister Hon. Dotto Biteko, at a meeting with Peak's Commercial Manager on 22 February 2018, confirmed that there is a large backlog of mining licence applications that need to be considered by the Mining Commission once it begins work. Due to this backlog the Deputy Minister confirmed that they would adopt a fast track process to clear as many applications in as short a time as possible. The Deputy Minister Hon. Nyongo had previously also confirmed at a meeting with Peak's CEO in December that due to their strategic importance to the country the SML applications will be given priority over standard Mining Licence Applications. At the same meeting the Assistant Commissioner for Minerals confirmed that as of December there were only three pending SML applications of which Peak's is one.

The next steps for Peak will be to conduct a technical workshop with the Ministry of Minerals and other relevant government stakeholders in Dodoma in early April. The workshop has been directly requested by the Deputy Minster Hon. Biteko and will assist the government to consider the SML application in a timely manner.



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Rocky Smith CEO said "Peak's Ngualla Project is the leading undeveloped rare earth project in the world as a result of the resource grade/quality and the fully integrated mine to market solution. Peak's decision and capability to refine the rare earth metals will extract the maximum value while maintaining absolute control of the finished products. This is one of the key differentiators from our competitors, who will either sell mixed concentrates or rely on outside groups to produce products for them. We see getting the SML granted, which I am now pleased to say is looking imminent, as a major milestone toward getting into production and for adding value for our shareholders."

## **Ngualla Project overview**

Ngualla is one of the world's largest and highest grade undeveloped neodymium (Nd) & praseodymium (Pr) rare earth projects.

The Ngualla Rare Earth Project is centered on the Ngualla Carbonatite in southern Tanzania, 147 kilometres from the city of Mbeya on the edge of the East African Rift Valley. The name 'Ngualla' comes from the Swahili word for 'bald head', which reflects the appearance of the hill – mostly bare land on which there is no habitation, agriculture, grazing or reserves.

The weathered Bastnaesite Zone that is the target for development occurs as a thick blanket of high grade rare earth mineralisation from surface on Ngualla Hill. Rare earths are contained within the mineral bastnaesite within a weathered host rock that contains very low levels of phosphate, carbonate, uranium and thorium compared to other rare earth deposits. This makes it easy-to-mine by low strip ratio open pit techniques and subsequently upgraded to a high grade processed concentrate through a multi stage processing plant on site.

The Total All Resources Mineral Resource estimate for the Ngualla Project above a 1% REO cut-off is 214.4 million tonnes at 2.15% REO, for 4,620,000 tonnes of contained REO. Included in this Mineral Resource is the Weathered Bastnaesite Zone Mineral Resource, the measured and indicated portions of which form the basis of the Ore Reserve estimate. ASX Announcement "Ngualla Rare Earth Project – Ngualla Mineral Resource estimate re-stated to include barite" as of 2 March 2017 provides further details and assumptions.

The Ore Reserve estimate for the Ngualla Project is 18.5 million tonnes at 4.80% REO for 887,000 tonnes of contained REO. ASX Announcement "Ngualla Rare Earth Project – Updated Ore Reserve" as of 12 April 2017 provides further details and assumptions. The Ore Reserve represents just 22% of the Total All Resources Mineral Resource but is sufficient to support a mine life of 26 years.

The Company plans to export approximately 32,700 tonnes per annum of rare earth concentrate grading 45% REO from Tanzania to a UK refinery where it will be processed and converted into four saleable products, namely a mixed Neodymium and Praseodymium 99% pure oxide (2,800 tonnes), a mixed heavy and SEG carbonate (330 tonnes\*), Lanthanum carbonate (4,230 tonnes\*) and a Cerium carbonate (1,920 tonnes\*)

Tonnes presented as contained Rare Earth Oxide equivalent



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### **Multi-Commodity Potential of Ngualla**

Ngualla is also host to widespread, high grade niobium-tantalum, phosphate, fluorspar and barite mineralisation. These additional commodities are at an early stage of evaluation and represent potential upside opportunities for additional products from the project.

## **Highlights of the Bankable Feasibility Study and Optimisation**

Ngualla's potential is reflected in the results of the Bankable Feasibility Study (ASX announcement 12<sup>th</sup> April 2017 titled "BFS positions Ngualla as one of the world's lowest cost rare earth projects"), and the subsequent Project optimisation (ASX announcement 12<sup>th</sup> October 2017 titled "Lower price deck delivers similar BFS results for Ngualla") update released with the following highlights:

- Average Annual Post Tax Cash flow US\$ 108 million
- NPV10 Pre Tax and Royalties US\$ 686 million
- NPV10 Post Tax and Royalties US\$ 444 million
- IRR Post Tax and Royalties 22%
- Unit operating cost for NdPr/kg US\$ 32.24
- Pre-production CAPEX US\$ 365 million

#### **Rare Earth Market**

Peak's main minerals neodymium (Nd) and praseodymium (Pr) are the core ingredients for manufacturing permanent magnets (NdFeB magnets), which are used in high-efficiency electric-motors and generators enabling low carbon technologies, like wind energy, E-mobility and many others. The demand for NdPr is expected to grow rapidly as one of the core enablers for the upcoming new technology revolution.

The planned production basket is in line with the highest value and growth market. NdPr accounts for 80% of the Company's projected revenue and represents the main focus of the marketing, sales and business development strategy. With its unique Ngualla deposit in Tanzania, Peak Resources is perfectly positioned to become a sustainable and long term supplier to meet increased global demand.

For and on behalf of Peak Resources Limited.

Rocky Smith
Chief Executive Officer

#### **Compliance Statement**

Information relating to Infrastructure, project execution, cost estimating, metallurgical test work, exploration results, Mineral Resource estimates and Ore Reserve estimates is extracted from the report entitled "Lower price deck delivers similar BFS results for Ngualla" created on the 12th of October 2017 and is available to view on http://www.peakresources.com.au/asx-announcements/. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.