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## ARAFURA RESOURCES LIMITED (ASX: ARU)

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### China further tightens Rare Earth Production and Exports

China's central Ministry of Industry and Information Technology has published a draft report this week entitled 'Rare Earths Industry Development Plan 2009-2015', submitted to the State Council for review and implementation in 2010, which outlines plans to further tighten Chinese administration of rare earth quotas in the latest publication.

#### *Rare Earth quotas are to be tightened*

Arafura believes this report demonstrates the Chinese Government agency's intention to enforce strict mining quotas. This also applies to rare earth separation facilities that are governed by rare earth production quotas and licenses.

The report also indicated that China's current 35,000 tonnes per annum export quota for rare earths (REO) will reduce over the next six years, though no quantification of the degree of reduction is provided.

#### *A total ban imposed on some rare earths exports*

The report also outlines plans to impose a total ban on the export of some rare earths materials. These include Dysprosium (Dy), Terbium (Tb) and Yttrium (Yt). Dysprosium is a critical material used in the enhancement of magnets in the electric systems of hybrid and electric vehicles. The metal's property improves magnetic performance that is essential in electric car technology. Terbium and Yttrium are dominantly used as phosphors in energy efficient lights.

#### *The industry will be forced to consolidate*

China will shut down 80 rare earth separation and metal smelting facilities reducing the number of participants from 100 to just 20, to consolidate the industry and improve efficiency. Each of these 20 remaining separation and metal producers must produce at least 8,000 tpa REO to maintain a license to operate. In addition, the power to authorize the development of any new rare earths separation facility

will be moved away from Provincial Government Agencies and be controlled directly by the Central Governments Ministry of Information and Information Technology.

### *Why impose such a strict control?*

Arafura believes the imposition of such dramatic controls is a reflection of the vital strategic nature of rare earths, a reflection of China's domination in the rare earths industry at present, and also recognition that China resource supply, while large, does not meet internal demand growth particularly in the medium term.

Rare Earths are vital materials in energy efficiency and environmental pollutant reduction schemes. They are a key material for the hybrid car and electric vehicle industry and essential for energy efficient lights. Rare earths are also vital for the plasma and LCD televisions, efficient wind turbines, and automobile catalytic converters.

If China is to make inroads on its environmental standards and reduce pollution levels, then rare earths play a pivotal role. This is a signal that China's rare earths are for its own development, and that current recoverable reserves do not meet their own needs.

The centralisation and strict regulation on rare earths production and industry consolidation will also concentrate the market structure, placing more power on price structures with fewer agents.

Many of Chinas rare earths resources suffer from low recovery of 15% to 40%. Despite many years of focus this recovery rate has not improved and they appear to be at the limit of what is technologically capable.

### *What does it mean for Arafura?*

This tightening of the Chinese regulation on Chinese rare earths production means that Arafura's 100%-owned Nolans Project is placed perfectly to meet the demand of rare earths vital for new technology that will help deliver energy efficient and pollution reduction schemes.

The Nolans project is designed to produce 20,000 tonnes per year of rare earth oxides at a recovery rate of at least 80%, and an expected mine life of 30 years.

Nolans is enriched in high value rare earths compared to most Chinese operations and has a 40% revenue advantage compared to Chinese hard-rock resources. The project will also produce 160,000 tonne per year of fertiliser or technical grade phosphoric acid and a small by-product of uranium (150 tonnes), another competitive advantage to any other rare earths project.

The mix of rare earths from Nolans is currently valued at US\$10 per kilogram compared to US\$8 /Kg for Baiyan Obo (China's largest State Owned rare earth producer in Inner Mongolia), US\$7 /Kg for the southern China Sichuan deposits and US\$7 for the Mountain Pass deposit in the USA.

While the forecast demand for rare earths will certainly place an upward pressure on price, we expect to see further increases relating to a consolidation of industry players and marketers of rare earths, and a reduction in supply from China.

### *News to come*

A final report on the recovery of rare earths and phosphoric acid is due shortly. The Company hopes to have an update to the market early next week.

### **About Arafura Resources**

Arafura is a Perth-based specialty metals explorer and emerging producer which has operated in the Northern Territory for the past 20 years. It listed on the Australian Securities Exchange in 2003 and has an asset portfolio that will deliver long-term and sustainable value and growth.

Arafura's corporate office is located in Perth, Western Australia, with a regional office in Darwin, Northern Territory. Arafura's assets include the Nolans rare earths project. Other tenements that Arafura controls contain gold, copper and vanadium mineralisation.

Arafura's primary focus is the development of the Nolans rare earths-phosphate-uranium project. The deposit has a current resource of 30.3 million tonnes, containing 848,000 tonnes of rare earth oxides, 3.9 million tonnes of phosphate, and 13.3 million pounds of uranium (ASX: ARU 11/11/08). The Nolans deposit is capable of sustaining a mine life of 30 years. The Company has developed a processing flow sheet, and has demonstrated the recovery of rare earths, phosphoric acid and uranium at a pre-production scale pilot plant located at ANSTO (Australian Nuclear Science and Technology Organisation) in Sydney.

Arafura has an exploration and development program to grow its position in rare earth projects with additional growth beyond the Nolans Project. The Company will focus on the identification and development of rare earth projects and specialise in rare earth products and their markets.

For more information:

Fact sheets on Arafura Resources can be found on the Arafura Resources website at [www.arafuraresources.com.au](http://www.arafuraresources.com.au)

*The information in this release that relates to Arafura Resources Limited's exploration results and geological interpretation has been compiled by Mr Richard Brescianini BSc (Hons) and the information in this release that relates to Arafura Resources Limited's metallurgical results and interpretation has been compiled by Mr Steven Mackowski BAppSc, both full-time employees of Arafura Resources Limited.*

*Mr Brescianini is a Member of the Australian Institute of Geoscientists and he has sufficient experience with the style of mineralisation being reported to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code)" for reporting these exploration*

results. Mr Brescianini consents to the inclusion in this report of the contained technical information in the form and context in which it appears.

Mr Mackowski is a Fellow of the Australian Institute of Mining and Metallurgy and he has sufficient experience with the style of mineralisation being reported to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code)" for reporting these metallurgical results. Mr Mackowski consents to the inclusion in this report of the contained technical information in the form and context in which it appears.

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