ALKANE
RESOURCES LTD
ABN 35000689216

ASX ANNOUNCEMENT – 20 August 2009

DUBBO ZIRCONIA PROJECT
CHINESE RARE EARTH EXPORT CONTROL

- **The Dubbo Zirconia Project (DZP) in New South Wales remains one of the world's most advanced developments for zirconium, niobium, yttrium and rare earth production and is based upon a world class resource.**
- **The Demonstration Pilot Plant (DPP) at Lucas Heights, south of Sydney, has been operating continuously since 2008 and has proven the flow sheet for the DZP. The Company is receiving a positive response to its sample products.**
- **The Chinese Ministry of Industry and Information Technology has just released a draft plan "Rare Earth Industry and Development Plan in 2009 – 2015". The plan would result in more stringent export quotas for rare earths and a total ban on export of some rare earths.**
- **As a result, the DZP's development would see the project become the most significant producer of yttrium, dysprosium and terbium outside of China.**

Corporate Profile

Alkane Board

J. S. F. Dunlop (Chairman)

D. I. Chalmers (Managing Dir)

A. D. Lethlean

I. J. Gandel

I. R. Cornelius

L. A. Colless (Joint Secretary)
K. E. Brown (Joint Secretary)

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12 month share price range

A$0.515 - $0.15

Market Cap 19 August 2009

~A$77 million

ASX Code: ALK

244.6 million shares (Aug 09)

August 2009 Cash

~ $7.0 million

No debt

Media Relations

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Background

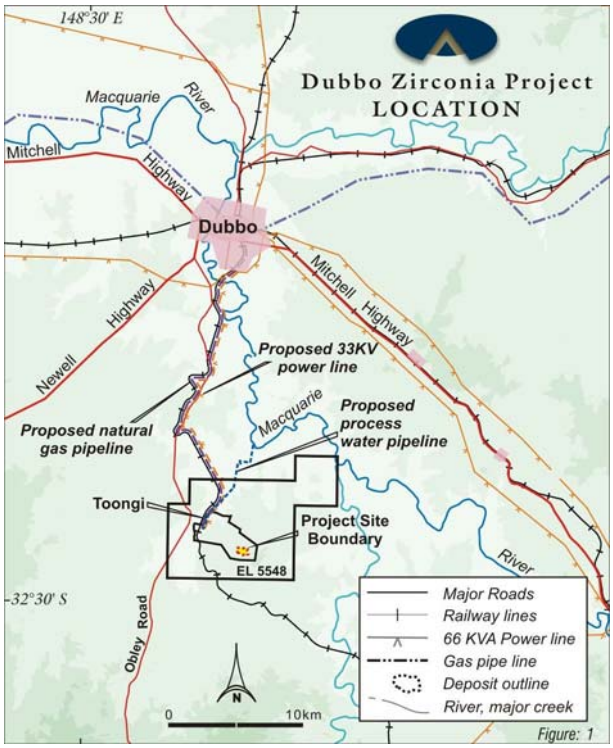
Recently the Chinese Ministry of Industry and Information Technology released a draft plan entitled "Rare Earths Industry Plan in 2009 – 2015" (REIP). This plan submitted to the federal Chinese Government proposes to restructure the rare earth industry, eliminating many smaller mining enterprises and focussing the industry within 20 larger producers. China currently produces 95% of the world's rare earth output.

The REIP would limit China's production to 130,000 to 150,000 tonnes per annum, and would also restrict exports. Global consumption in 2008 was estimated at 124,000 tonnes and demand is anticipated to be around 184,000 tonnes by 2014, after a small drop in 2009.

The Development Plan recommends limiting Chinese exports to below 35,000 tonnes a year but very importantly will prohibit the export of yttrium (Y) and the heavy rare earths dysprosium (Dy), terbium (Tb), thullium (Tm) and lutetium (Lu). Current consumption of the latter two elements Tm and Lu is very small but Y and Tb have increasing demand in the phosphors for energy efficient lighting, while Dy is an important component of high temperature magnets used in electric motors in vehicles. Much of the new demand for these metals is driven by environmental legislation to ensure emissions minimisation and energy efficiency.

Dubbo Zirconia Project

The Dubbo Zirconia Project (DZP) is located 30 kilometres south of the large regional centre of Dubbo in the Central West Region of New South Wales (figure 1). The DZP is based upon a large in-ground resource of the metals zirconium, hafnium, niobium, tantalum, yttrium and rare earth elements (see 2004 Annual Report for full details).



Over several years Alkane has developed a flow sheet consisting of sulphuric acid leach followed by solvent extraction recovery and refining to produce several products (figure 2). This flow sheet is currently being trialled by a Demonstration Pilot Plant (DPP) to recover a suite of zirconium chemicals, zirconia, a niobium-tantalum concentrate and yttrium-rare earth concentrates which are used in the expanding ceramic, catalyst, electronics, rechargeable batteries and permanent magnets, engineering ceramics, and specialty glasses and alloys industries, as well as the nuclear power industry.

The DPP was constructed within the facilities of ANSTO Minerals, a business unit of the Australian Nuclear Science and Technology Organisation, and is one of Australia's premier research facilities located at Lucas heights in the south of Sydney. The DPP was commissioned in 2008 and has operated several campaigns to date producing over 1,300kg of zirconium chemicals and nearly 250kg of niobium concentrate.

Test work to prove the recovery of yttrium and rare earths from the current flow sheet has continued in the laboratory at ANSTO and it is anticipated that addition of the YREE recovery flowsheet to the DPP circuit should be facilitated in the second half 2009.

Marketing activities are advanced with direct contact with potential customers in Japan, Europe and North America, and zirconium and niobium product samples being sent to Japan, China and Europe. Distribution of yttrium and rare earth samples is anticipated to commence later this year.

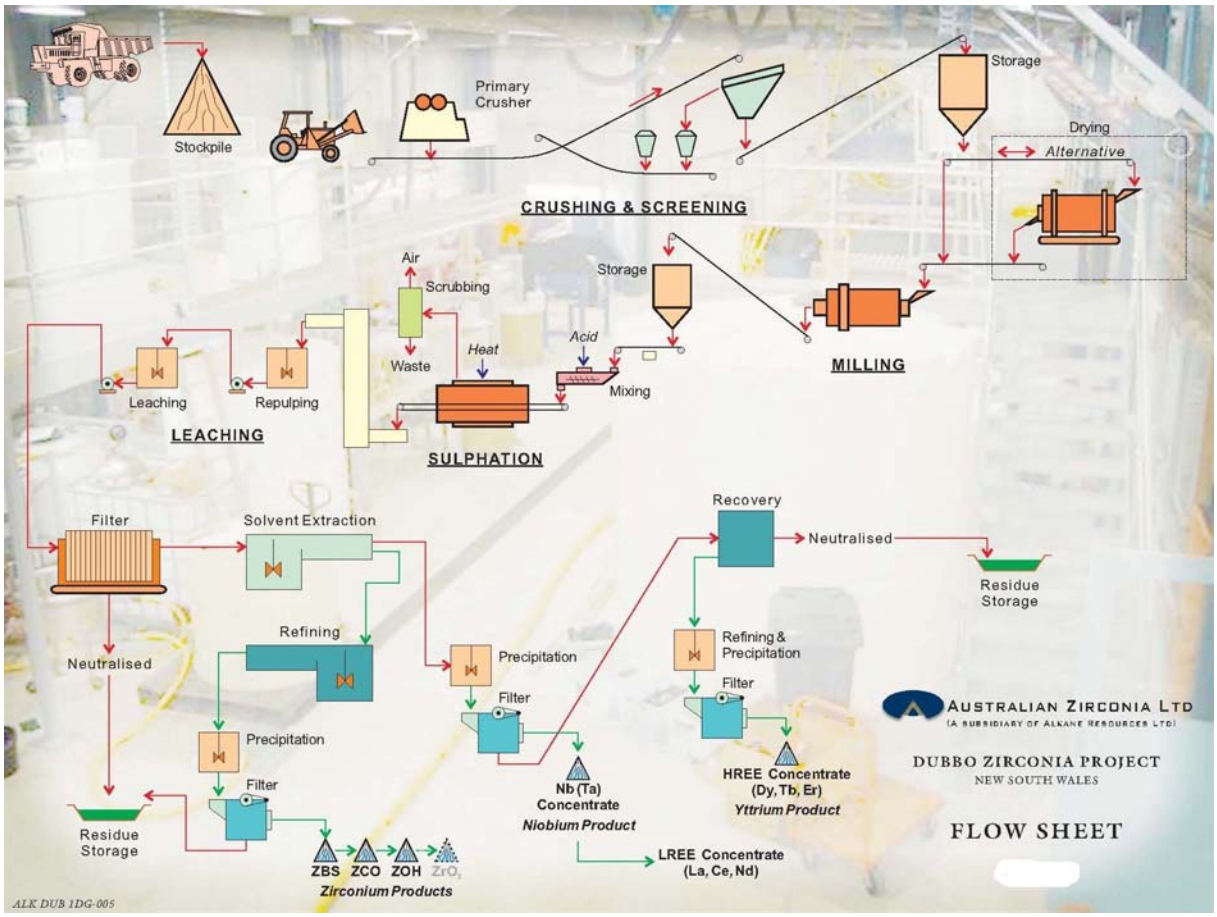


Figure 2

Possible Production Scenario

As part of the feasibility study in 2002, the primary metal output was estimated to be the zirconium chemicals and a base case ore throughput of 200,000 tonnes per annum was chosen to establish a market presence of less that 7% of total world demand. Since that time the zirconium market has expanded and a greater throughput is possible. Also demand for the niobium concentrate and yttrium and rare earth products has increased dramatically, and support a larger start up capacity.

The defined resource is large enough so that even at the expanded rate the open pit mining would have a life in excess of 200 years.

Product	**200,000 tpa**	**500,000 tpa**
ZBS, ZOH, ZCO	**9,000tpa(3ktpa ZrO_2)**	**22,500tpa(7.5ktpa ZrO_2)**
Nb-Ta concentrate	**1,000tpa(0.7ktpa Nb_2O_5)**	**2,500tpa(1.75ktpa Nb_2O_5)**
LREE concentrate	**990tpa (REOs)**	**2,475tpa (REOs)**
YHREE concentrate	**301tpa (REOs)**	**753tpa (REOs)**

ZBS = zirconium basic sulphate; ZOH = zirconium hydroxide; ZCO = zirconium carbonate; Equivalent ~99% ZrO_2 + HfO_2. Nb-Ta concentrate = ~77% Nb_2O_5; 1.0% Ta_2O_5 calcined basis

Yttrium - Rare Earth Individual Production (assumed 70% recovery)

	REO	200,000tpa	500,000tpa
Lanthanum	**La_2O_3**	**252**	**630**
Cerium	**CeO_2**	**475**	**1188**
Praseodymium	**Pr_6O_{11}**	**52**	**131**
Neodymium	**Nd_2O_3**	**182**	**456**
Samarium	**Sm_2O_3**	**28**	**71**
Light rare earths	**Total LREE**	**990tpa**	**2475tpa**
Europium	**Eu_2O_3**	**1**	**2**
Gadolinium	**Gd_2O_3**	**28**	**69**
Terbium	**Tb_4O_7**	**4**	**11**
Dysprosium	**Dy_2O_3**	**26**	**66**
Holmium	**Ho_2O_3**	**5**	**14**
Erbium	**Er_2O_3**	**15**	**37**
Thullium	**Tm_2O_3**	**2**	**5**
Ytterbium	**Yb_2O_3**	**13**	**32**
Lutecium	**Lu_2O_3**	**2**	**5**
Yttrium	**Y_2O_3**	**204**	**511**
Y + heavy rare earths	**Total YHREE**	**301tpa**	**753tpa**
	Total YREE	**1291tpa**	**3228tpa**

These potential yttrium and heavy rare earth outputs would make the DZP production some of the largest in the world outside of China.

Current Program

The DPP operation was planned to confirm the process flow sheet, provide engineering data for capital and operating costs and also to generate substantial product for market evaluation. Data from the DPP and Letters of Intent from future customers will be incorporated in the current Definitive Feasibility Study. A development decision is anticipated by mid 2010, with production possible late 2011.

TZ Minerals International Pty Ltd in Perth are the program and feasibility study managers; a task they have been coordinating since the inception of the project

The DZP is the most advanced non-Chinese development for zirconium, niobium, yttrium and rare earth production. While the foci of Molycorp's Mountain Pass operation in California and Lynas' Mt Weld planned operations in Western Australia and Malaysia. are the production of light rare earths, Alkane is in a unique position to be the leading Western heavy rare earths producer over the next decade.

Identified Mineral Resources at 31 December 2008:

Toongi Deposit	Tonnage (Mt)	ZrO_2 (%)	HfO_2 (%)	Nb_2O_5 (%)	Ta_2O_5 (%)	Y_2O_3 (%)	REO (%)	U_3O_8 (%)
Measured	**35.70**	1.96	0.04	0.46	0.03	0.14	0.75	0.014
Inferred	**37.50**	1.96	0.04	0.46	0.03	0.14	0.75	0.014
TOTAL	**73.20**	1.96	0.04	0.46	0.03	0.14	0.75	0.014

These Mineral Resources are based upon information compiled by Mr Terry Ransted MAusIMM (Principal, Multi Metal Consultants Pty Ltd) who is a competent person as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Terry Ransted consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. The full details of methodology were given in the 2004 Annual Report.

BACKGROUND

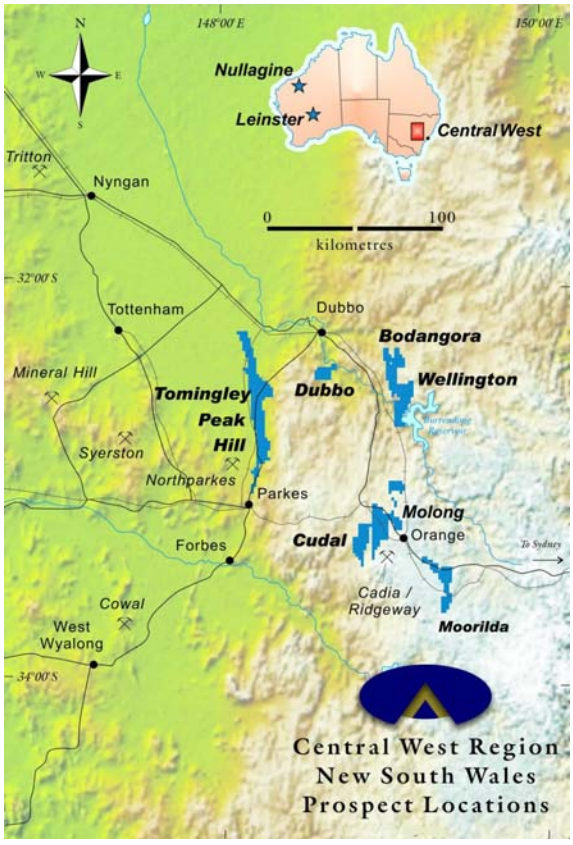
Alkane is a multi commodity explorer and miner with its operations focussed in the **Central West** of **New South Wales**, centred about 400km northwest of Sydney. Over several years, including experience in developing the Peak Hill Gold Mine, Alkane has built a substantial resource base and is proceeding towards several developments:

The **Tomingley Gold Project** currently has a **840,000 ounce gold resource** within the **Wyoming and Caloma deposits**, (full details 2008 Annual Report). A feasibility study for the development of the project with potential 50,000 to 60,000 ounce per annum production is anticipated to be completed before the end of 2009.

Near **Orange,** the Company has a joint venture (**ODEJV**) with Newmont, one of the world's largest gold miners, which resulted in the discovery in 2006 of a potentially significant gold deposit at **McPhillamys** within the **Moorilda Project**. This discovery includes intersections of **123 metres grading 1.96g/t gold** and **77 metres at 1.65g/t gold** within a 600 metre by 200 metre mineralised zone. Recent diamond drilling has confirmed the potential of the project to host a major gold system with an intersection in **KPD003 of 366 metres grading 1.85g/t gold.**

Elsewhere within the region, Alkane has defined a 2 million tonne 1.00% copper Indicated Resource (details 2005 Annual Report) which is being reviewed for its development potential at **Galwadgere** within the **Wellington Project**, and several other advanced exploration projects with encouraging drill intercepts. New exploration targets have been identified at several other locations.

In **Western Australia** the Company holds 5 million shares (6%) of listed iron ore explorer **BC Iron Limited** and a diluting 23% residual interest in a nickel sulphide joint venture with **Xstrata Nickel (Jubilee)** near **Leinster**.



Unless otherwise stated above, the information in this report that relates to exploration results, mineral resources and ore reserves is based on information compiled by Mr D I Chalmers, FAusIMM, FAIG, (director of the Company who has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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. Ian Chalmers consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Demonstration Pilot Plant Images:

Main DPP Shed

Internal Main Shed

Rotary Kiln

Primary filter

Solvent Extraction Circuit

Zirconium and Niobium Product Recovery

Zirconium Sulphate Filter