

HD Reed Industrial Minerals Pty Ltd. - Quarterly Activities Report

WC 2,070 words

PD 29 July 2014

SN ENP Newswire

SC ENPNEW

LA English

CY (c) 2014, Electronic News Publishing. All Rights Reserved.

LP

Release date - 25072014

During the quarter Reed Industrial Minerals Pty Ltd continued to advance the Mt Marion Lithium Project with the successful production of lithium hydroxide from a semi pilot plant in the USA.

TD

RIM is owned 70:30 by Reed Resources Ltd and leading **mining** services provider Mineral Resources Limited (MRL). MRL fund and operate the project through their subsidiary, Process Minerals International Pty Ltd.

The semipilot plant was commissioned in March 2014 and the test work demonstrates the successful scale up RIM's proprietary hydrometallurgical flowsheet including the purification and electrolysis of lithium chloride solutions, which can be obtained from either mineral or brine feedstocks. Reproducibility of the electrolysis process, and the suitability and durability of the ion exchange membrane have been confirmed as suitable for commercial operation. The electrolysis process is similar to the Chlor Alkali process used to produce caustic soda (sodium hydroxide) and hydrochloric acid.

Advantages of the RIM process include:

ability to utilise existing Chlor alkali and new Chlor Alkali package plants to produce LiOH,

high current efficiency in electrolysis that has the potential to deliver competitive unit production costs and very low impurity levels in final product without additional purification phases.

The results to date are particularly encouraging with the purification of lithium chloride exceeding expectations and efficiency across the electrolysis membrane exceeding assumptions in the Pre feasibility Study (PFS).

Project Development and Corporate Strategy

Subject to RIM board approval, an Engineering Cost Study to develop capital and operational costs is the next stage in the development of the project.

The RIM lithium hydroxide production process is a wholly owned technology of RIM. An International patent application (PCT) has received a positive Preliminary Report on Patentability and national phase patent applications have been filed in Australia, Canada, Chile, **China**, Malaysia and the USA.

Strategic discussions are in progress with third parties, including existing Chlor alkali producers, with the aim of developing an appropriate business structure for the commercialisation of the RIM process technology. Discussions remain preliminary and there can be no assurance that a binding proposal will emerge. Reed and MRL will keep the market informed as matters develop further.

Lithium market

The prominent, respected lithium industry researchers forecast a large and sustained increase in the demand for high purity, battery grade lithium hydroxide and carbonate at compound rates of approximately 20% pa. The growth is underpinned by continuing use of rechargeable batteries in consumer electronics and increased market penetration of battery electric and hybrid electric vehicles (BEV and HEV) in commercial and private applications.

The current median prices for battery grade lithium hydroxide and lithium carbonate are US\$7,500 and US\$6,400 per tonne, respectively, on a CIF basis to Europe and US respectively.

BARRAMBIE TITANIUM PROJECT

During the quarter the **Company** continued to advance its Barrambie Titanium Project with the commencement of a mini pilot plant in Canada to demonstrate the scale up from laboratory scale batch testing to continuous operation of a proprietary process flowsheet.

Barrambie is one of the world's highest grade titanium deposits, containing total Indicated and Inferred Mineral Resources of 47.2Mt at 22.2% TiO₂, 0.63% V₂O₅ and 46.7% Fe₂O₃, at a cutoff grade of 15% TiO₂.

The plant will test a proprietary chloride based process for the recovery of titanium as titanium dioxide (TiO₂), vanadium pentoxide (V₂O₅) and **iron** as hematite (Fe₂O₃) from run of mine **ore** at a feed rate of 10 kilograms per day and be completed in July 2014. Sufficient information will be generated to allow for a rigorous process model to be compiled, which will enable both capital and operating costs to be estimated at a Prefeasibility Study (PFS) level.

The process, pioneered in Canada, has produced high purity (>99%) titanium dioxide from Barrambie oxide ores and concentrates at high recoveries. The **Company** licenced the patented process to extract all valuable metals from its Barrambie deposit in December 2013.

A Scoping Study by Snowden **Mining** Industry Consultants in October 2013, based on this process, indicated the potential for a viable hard rock titanium and vanadium **mining** and processing operation and recommends progression to a PreFeasibility Study. Average net operating costs per tonne of titanium dioxide recovered were estimated at A\$1,214/t with an indicative accuracy of +/-35%. The long term price assumption used in the study was US\$3,000/t.

CAUTIONARY STATEMENT

The Scoping Study referred to in this report is based on low level technical and economic assessments, and is insufficient to support reporting of **Ore** Reserves using recognised codes or guidelines or to provide definitive assurance of an economic development case, or to provide certainty that the conclusions of the Scoping Study will be realised.

Project Development and Corporate Strategy

Subject to the success of the minipilot scale test work it is Reed's intention to proceed with a Pre feasibility Study (PFS) as recommended by Snowden. The **Company** is working with its preferred engineering **firm** to finalise the proposed work plan to the end of the PreFeasibility Study, which will be funded internally and completed by the end of the December 2014.

The Scoping Study has identified many opportunities to further improve the economics by optimising factors such as using higher grade concentrates as feed, increasing plant throughput rate, cogeneration of electricity to reduce operating costs and the recovery and marketing of pure **iron** and aluminium oxide products.

The currently preferred project development strategy is to advance the project to a suitable stage of evaluation to attract a joint venture partner to fund and operate the development of the Barrambie project.

Titanium and Vanadium market

The majority of titanium feedstocks (US\$17 **Billion** or 85% by value) are used to produce titanium dioxide pigment which is then used as an additive in paints, plastics, paper and ink with the balance (15%) used to produce titanium metal products.

The current median price for high quality titanium dioxide pigment is US\$3,380 per tonne on a CIF basis to USA.

Approximately 85-90% of global vanadium production is consumed in the steel industry. Other uses include vanadium containing titanium alloys, accounting for 5-10% of demand, and various chemical and battery applications, which make up around 1-3% of demand.

The current median price for vanadium pentoxide is US\$14,500 per tonne on a FOB basis to Rotterdam. The **Company** is party to a Sales and Marketing Agreement with a leading global commodity trader, dominant in the vanadium market, for the first ten years of production from Barrambie.

MT FINNERTY PROJECT

The Mt Finnerty Project located about 65km east of Koolyanobbing is currently being explored for **iron ore** and nickel mineralization in its own right.

Iron Ore

During the quarter a short program of RC drilling was completed on one of more than twenty targets, which demonstrated the exploration potential to several interested parties.

PCF Capital Pty Ltd is continuing a **sale** process for wholly owned subsidiary Mount Finnerty Pty Ltd ('MFPL') which holds the tenements and **iron** rights, as part of its continuing asset realization program. Indicative bids were received and discussions remain preliminary and there can be no assurance that a binding proposal will emerge. Reed will keep the market informed as matters develop further.

Nickel (Barranco 100%, Reed option to acquire 100%)

During the quarter a Downhole EM survey of two diamond drill holes (GDD007 and 008) drilled in April failed to locate any off hole conductors.

GDD007 drill hole penetrated the position of surface EM plate (MF02) and the basal contact but did not return any massive nickel sulphides. It did, however, intersect stringer sulphides over a wide interval back up the hole, associated with talc carbonate alteration and mafic dyke intrusion. Petrography trace amounts of pentlandite were present.

PROJECT ACQUISITIONS

LAKE JOHNSTON NICKEL PROJECT

Reed has acquired interests in several tenements with demonstrated nickel prospectivity in the Yilgarn region to build a significant nickel exploration package, at no material upfront cost. Reed's aim is to add value to its nickel portfolio through exploration success and for it to become independently financed as it progresses its Mt Marion Lithium and Barrambie Titanium projects.

During the quarter Reed entered into an agreement with Hannans Reward Ltd (ASX: HNR) ('Hannans') to acquire 80% interest in E63/1365 in return for sole funding exploration up to a decision to mine. In 2012 Hannans intersected nickel sulphide mineralization in a single reverse circulation drill hole (MGRC059) testing a coincident geochemical/magnetic anomaly at Mt Gordon.

As part of its due diligence process Reed Resources has completed additional petrography on samples from MGRC059 which confirmed trace amounts of slightly supergene altered (violarite) pentlandite plus accessory pyrrhotite and chalcopyrite coincident with the end of hole sample that returned approximately 1% sulphur plus subgrade nickel.

MGRC059 did not penetrate the footwall contact which is typically the prospective position for nickel sulphide accumulation in komatiite hosted nickel sulphide deposits. To this end Reed has remodelled targets based on newly acquired geophysical data and is planning additional drilling and subsequent downhole geophysical surveys.

PROJECT DIVESTMENTS

COMET VALE **GOLD PROJECT**

During the quarter the **Company** completed the **sale** of its subsidiary Sand Queen **Gold** Mines Pty Ltd (SQGM) to a private **company**. SQGM holds the Comet Vale **Gold** Project, located near Kalgoorlie.

Reed received a completion payment from the purchaser of \$1.75 **million**. In addition, the purchaser has paid the **Company** a further amount of approximately \$65,000, representing funds held by SQGM to support environmental **bonds** lodged with the Department of Mines and Petroleum.

In accordance with the **sale** agreement, the **Company** also expects to receive the final instalment of \$50,000 upon grant of E29/927 expected in November 2014.

MEEKATHARRA **GOLD PROJECT**

During the quarter a meeting of creditors of GMK Exploration Pty Ltd (Subject to Deed of **Company** Arrangement) approved a binding **sale** agreement with Metals X Limited (ASX:MLX) for the **sale** and **purchase** of the assets comprising the Meekatharra **Gold** Project.

The key terms of the **sale** agreement were:

an estimated **purchase** price of around \$9.9 **million** comprising:

\$9.4M cash and

the transfer of 24 **million** shares held by MLX in Reed (with a market value of approximately \$500,000);

otherwise the same terms of the original **sale** agreement as previously announced.

The **sale** to Metals X Limited was completed by the Deed Administrators on Friday 27 June 2014.

The Meeting of Creditors also approved a Deed of **Company** Arrangement (DOCA) proposed by Reed Resources Ltd.

The **Company** expects to receive gross value of around \$5.1M comprising:

subject to Reed shareholder approval, Reed would receive the transfer and buy back of 24M shares in Reed. If the transfer and buy back was not approved by Reed shareholders, the relevant shares would be sold and the proceeds of **sale** remitted to Reed and

\$4.56M in cash, which was received on 30 June 2014.

The **Company** understands that under the approved DOCA a pool of funds is expected to be available for the remaining unsecured creditors of around \$4.6M, which under the statutory adjudication process is currently expected to be distributed by the Deed Administrators of GMKE in the second half of 2014.

Following the final distribution to creditors under the DOCA Proposal and the retirement of the Deed Administrators, the claims of all creditors of GMKE (including Reed) would be extinguished in full.

CORPORATE

Finances (unaudited)

Cash and term deposits on hand as of 30 June 2014 totalled \$13.2 **million**, including \$6.2 **million** in restricted use term deposits supporting performance **bonds** and other contractual obligations.

Extraordinary General Meeting

Subsequent to the end of the quarter on 3 July 2014 the **Company** provided notice of an extraordinary general meeting of shareholders. The meeting is to be held at the Celtic Club, 48 Ord street, West Perth, Western Australia on Friday, 8 August 2014 at 3.00pm Western Standard Time for the purpose of considering a special resolution to approve a selective buyback of 24M shares held by Metals X Limited that was provided as consideration for the **purchase** of the Meekatharra **Gold** Project.

Contact:

Reed Industrial Minerals Pty Ltd Level 1, 672 Murray St West Perth WA 6005 Tel: +61 8 9322 1182 Fax: +61 8 9321 0556

[Editorial queries for this story should be sent to newswire@enpublishing.co.uk]

CO mnr lau : Mineral Resources Limited | reedr : Reed Resources Ltd

IN i211 : Metal Ore Mining | i232 : Mineral Mining Support Activities | ibasicm : Basic Materials/Resources | igoldm : Gold Ore Mining | imet : Mining/Quarrying

NS npress : Press Releases | ncat : Content Types

RE usa : United States | waustr : Western Australia | apacz : Asia Pacific | ausnz : Australia/Oceania | austr : Australia | namz : North America

PUB Electronic News Publishing Ltd.

AN Document ENPNEW0020140729ea7t0003n