

# **Union Resources Limited**

A.B.N. 40 002 118 872

Tel: +61 7 3833-3833 Fax: +61 7 3833-3888 Level 1, 500 Boundary Street, Spring Hill, Brisbane, Qld, Australia Postal Address: PO Box 728 Spring Hill Q Australia 4004

Thursday, 11 November 2010

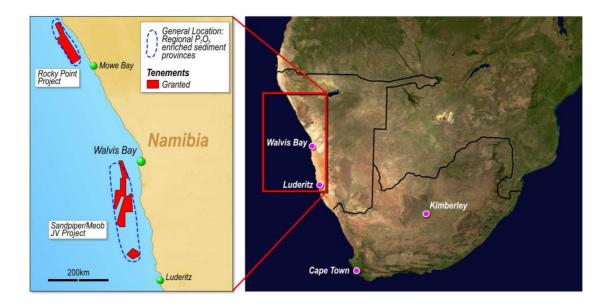
Company Announcements Office Australian Securities Exchange

## NAMIBIAN MARINE PHOSPHATE SCOPING STUDY POSITIVE ECONOMICS INDICATED OVER A LONG LIFE OPERATION

Joint Venture partners Union Resources Limited (ASX: "UCL") (42.5%), Minemakers Limited (ASX: "MAK") (42.5%), and Tungeni Investments c.c. ("Namibian Partner") (15%), are pleased to announce the results of the Scoping Study by the Joint Venture Company, Namibian Marine Phosphate Pty Limited ("NMP") for the Sandpiper/Meob Marine Phosphate Project ("Phosphate Project").

## HIGHLIGHTS

- At Scoping Study level, the Namibian marine phosphate project is potentially economic.
- Operating costs have been estimated at US\$57.76/t FOB Walvis Bay for an operation on beneficiated material, ramping up to 3Mtpa.
- Start-up capital costs are estimated as US\$144M.
- The beneficiated material is indicated to be suitable for marketing to fertiliser producers and for the manufacturer of phosphoric acid by the Joint Venture.



## **RESOURCE BASE AND PROJECT LIFE**

As previously reported, the estimated resources categorisation of the Offshore Namibian Phosphate Project is as follows:

Indicated Category:	73.9 million dry tonnes at 20.57% P <sub>2</sub> O <sub>5</sub>
Inferred Category:	1,507 million dry tonnes at 18.7% $P_2O_5$
Total	1,581 million dry tonnes at 18.8% P <sub>2</sub> O <sub>5</sub>

Additionally, there is potential to increase this resource base considerably. As has been advised previously, the sampling upon which the above resource estimates is based was only carried out in the upper 2m of the phosphatic sediments. From previous drilling, the latter is known to be considerably thicker in the tenements, and the JV is engaged in a programme of deeper penetration sampling. In accordance with clause 18 of the JORC Code, the JV considers there is a reasonable exploration target of an additional 1 - 2 Billion tonnes in the grade range of 18 - 21% P<sub>2</sub>O<sub>5</sub>. (This potential quantity and grade is conceptual in nature, there has been insufficient drilling to define an enlarged Mineral Resource, and it is uncertain if further exploration will result in the determination of an enlarged Mineral Resource).

The Scoping Study incorporates a ramp-up to 3Mtpa of beneficiated product by Year 3 of operation. The economics indicated below show potential for an operation lasting over a century.

## PROJECT ECONOMICS SUMMARY

The financial highlights from the Scoping Study Base Case Study over the first 25 years of project operation are summarised as follows:

	Scoping Study Base Case
Scoping Study Base Case Financial Model	25 years
Scoping Study parameters	±30%
Saleable Rock Phosphate per annum	3.0mtpa
Cash Operating Costs, FOB Walvis Bay	\$57.76/t
Capital Costs (Years 1-3)	\$144M
Capital Costs per tonne	\$7.65.t
NPV @ 10% discount rate	\$312M
NPV @ 15% discount rate	\$133M
IRR	25.5%

\* All dollar figures are expressed as United States dollars ("US\$"), unless expressed otherwise.

The Rock Phosphate selling price has been discounted on the current Rock Phosphate selling price to adjust for the grade differential and quality of final product.

Base case production parameters include:

Rock Phosphate sold concentrated grade	28% P <sub>2</sub> O <sub>5</sub>
Annual throughput development from Year 3	5.0Mt
Annual sales, from Year 3	3.0Mt

## **Scoping Study Participants**

In addition to the technical staff of the JV participants, international consultants undertook key aspects of the Scoping Study as follows:

Area	Consultants
Marine mining/dredging	IHC Marine and Mineral Projects and Jan de Nul Group
On shore reclamation	Patterson and Cooke Consulting Engineers (Pty) Limited
Process Plant	Batemans Advanced Technology Limited

Other aspects of the phosphate project were reviewed by appropriate parties to ensure the proposed operating parameters were feasible. They included Walvis Bay Municipality, Namport, Namwater, Nampower and the Ministry of Mines and Energy.

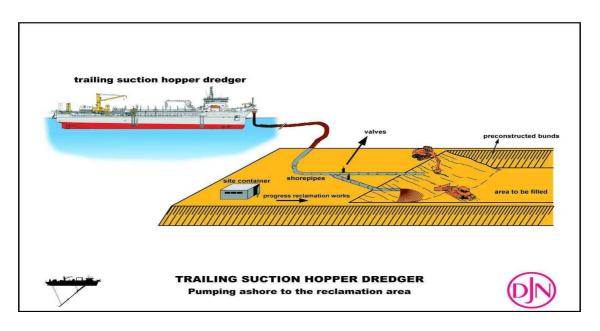
#### Marine Mining/Dredging

The marine consultants confirmed that the dredging option, as put forward by JDN, employing the vessel the Cristobal Colon dredging to a depth of 225m is currently recommended as the preferred option for recovery and transport of the phosphate sediments to shore.

#### Shore Transfer

The transfer of slurry from the dredge vessel to an onshore buffer/receiving pond has been included as part of the marine mining/dredging process provided in the cost price from the contractor. The shore transfer involves a flexible pipe being attached to the vessel and the mined material is then pumped to shore as is commonly used in the dredging industry.

Slurry consultants, Patterson and Cooke, have carried out the land based study which includes buffer ponds, a pump station and overland pipeline which allows the slurry of mined material to be pumped from the onshore buffer pond point to the proposed process plant location at Walvis Bay, which is around 15km north of the shore transfer point.



## Processing

Processing studies were carried out on material recovered from an area which had been sampled sufficiently densely to enable a resource at Indicated category to be estimated. It is considered likely that actual run of mine ore will average a higher grade than this sample's 18.5%.

Bateman's processing testwork has indicated that through conventional sizing, screening and attrition processes the mined material can be concentrated to 28%  $P_2O_5$  and, in addition, attrition testwork also showed a partial removal of the contaminant gangue including iron (Fe), magnesium (Mg), aluminium (AI) and insoluble matter into the slimes.

Chemical testwork completed to date shows that the Namibian rock concentrate can be used to make either Phosphoric Acid or Single Super Phosphate ("SSP").

Batemans has also initially investigated further enhancing the quality and grade of final product concentrate through a calcination process. Further test and costing work on this will be carried out during the Feasibility Study.

In addition Bateman have opined that the concentrate can be converted into wet process acid in a similar fashion to the results reported in the Prayon test work report of 2004.

## Infrastructure

In principle the allocation of land and fresh water requirements have been confirmed and are within the design parameters for the proposed process plant. In addition it has been confirmed that the port has the capacity to handle, store and load the final product onto ships for final delivery to the customer.

## Start-up and Ongoing Capital Costs

The estimated capital costs have been put forward by the various consultants at a scoping study level at  $\pm 30\%$ . Capital for project establishment and ramp-up to 3Mtpa is as follows:

	Estimated Cost
Feasibility/definitive engineering	\$7.0M
Marine mobilisation/demobilisation, pipe installation and piping equipment, years 1-3	\$57.6M
Reclamation area, pump station and piping to the Process Plant	\$40.5M
Process Plant	\$36.1M
EPCM, owners costs and working capital, years 1-3	\$32.9M

In following years, working capital, including mobilisation and demobilisation of the dredge, is estimated at \$13.4M to \$18.4M per annum.

## **Operating Costs**

Over the 25 year project life, FOB operating costs on beneficiated phosphate are estimated as \$57.80/t.

Capital costs per tonne are estimated at \$7.60/t for a total project cost of \$65.40/t.

## Environment

A review of environmental requirements, potential impacts and associated risks has been completed at the scoping level. There are requirements for standard environmental impact assessments and management program reports to be completed and approved by relevant local and government authorities that will be further developed as part of the Feasibility Study and in support of a Mining Lease Application. However, at the scoping stage, there are no specific issues that have been identified as representing a potential terminal risk to the project for both Marine or land activities proposed.

Initial environmental baseline studies have been completed by external consultants for the target mining area. Results indicate there are no unique species or conditions that would present potential terminal risk to the project activities.

## Summary

The positive results of the scoping study show the project's economics and long life production potential and indicate that NMP and its shareholders should progress the project rapidly through to completion of a feasibility study beginning at the start of 2011.

Yours faithfully UNION RESOURCES LIMITED

Chris Jordinson Managing Director

#### **Competent Person Statement**

The information in this report that relates to Mineral Resources is based on information compiled and reviewed by Roger J. Daniel, B.Sc. (Hons) Geology, London, Pr.Sci.Nat., who is a full-time employee of the Company and who is a Member of The Australian Institute of Mining and Metallurgy. Mr Daniel has sufficient experience deemed 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'. Mr Daniel consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.