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ASX Code: BPL

ASX Announcement

15 April 2014  
(previously lodged on 2 April 2014)

This notice serves to clarify the Newsletter lodged with the ASX on 2<sup>nd</sup> April 2014. Changes to the second paragraph of 'Share Purchase Plan to fund BPL going forward' (page 2, below) clarify the references to Mineral Resources and Potential described in the Newsletter. Notes at the end of the Newsletter (page 7) describe the estimation process and the proposed exploration of the Potential.

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## Quarterly Newsletter – April 2014



*Broken Hill Prospecting's promotional booth attracts attention at the Resources Investment Symposium, Broken Hill. (Photo courtesy of R. Barnes)*

Dear Shareholder and Broken Hill Prospecting Supporter,

This year commenced at high speed with considerable interest in Broken Hill Prospecting's ('BPL') project and the opportunities it offers to provide the backbone for new chemical businesses in western NSW. This newsletter outlines plans for the company to raise working capital through a

shareholder purchase plan (SPP). The new funds will help to advance the project and attract partners for the development of a sulphuric acid based industry as well as the recovery of cobalt from BPL's vast cobalt-pyrite resources.

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### **Share Purchase Plan to fund BPL going forward**

Shareholders of the Company are being offered participation in a Share Purchase Plan (SPP). Each existing eligible shareholder, irrespective of the size of their shareholding, has the opportunity to purchase additional shares in BPL. Details of the SPP which closes on 6 May 2014 are explained in a separate document and available on BPL's website [www.bhpl.biz](http://www.bhpl.biz).

At the time BPL listed on the ASX in February 2011 the Company's tenements contained an estimated 15 million tonnes of 2.1 pounds per tonne cobalt as an Inferred Mineral Resource. BPL's exploration since listing has more than doubled this estimate to an Inferred Mineral Resource of 35.7Mt of 1.85 pounds per tonne cobalt and has also determined the potential for another 37-59Mt of between 1.70-1.85lb/tonne cobalt. This Potential is conceptual in nature. More drilling is required to further define the Potential and there is no certainty that this will result in a Mineral Resource. In addition, untested mineralisation is known to extend at depth and along trend for over ten kilometres. The deposit is considered to be one of the world's largest undeveloped cobalt resources (without associated nickel or copper) and since listing on the ASX the Company has added extraordinary value to the deposit.

BPL formed Broken Hill Chemical Ltd as a vehicle to process the cobalt pyrite ore and produce sulphuric acid and cobalt co-products and is now seeking a partner to assist in advancing feasibility studies and to progress development of this business.

Funds raised under the SPP will provide working capital to assist BPL to attract a partner by advancing metallurgical and scoping studies. The work will include detailed assessment of sulphuric acid markets, identification of potential customers and business modelling of various process options.

1-Apr-14	Record Date	Date on which Broken Hill Prospecting determined the Eligible Shareholders
2-Apr-14	Announcement Date	Date of the Announcement of the Share Purchase Plan
8-Apr-14	Opening Date	Share Purchase Plan opens

6-May-14	Closing Date	Share Purchase Plan closes. Applications must be received by 5pm Sydney Time
13-May-14	Allotment Date	Shares allotted. Trading expected to commence on ASX on next Trading Day
16-May-14	Dispatch Date	New Share Statements sent to Shareholders

**Good news for small explorers – innovative tax reform**

In March the federal government rubber stamped the Mineral Exploration Tax Credit (METC) which is an innovative tax reform measure that will enable Australian junior minerals exploration companies with ‘no taxable income’ and current losses to pass these back to Australian resident shareholders in the form of tax credits.



**Cobalt will be necessary for electric car battery gigafactory**

USA’s Tesla Motors is planning to build a “gigafactory” which will be the largest battery factory in the world. This is positive news for future cobalt markets because the required raw materials will include cobalt, lithium, aluminum and copper. Tesla plans to be producing about 1,000 electric automobiles a week by the end of 2014 at its current Fremont factory. By 2020, the new gigafactory is expected to produce enough batteries for more than 500,000 Tesla electric cars a year. With between 6-9kg of cobalt used in every lithium-ion electric vehicle battery the plant is expected to add to a growing international demand for new, reliable and low-risk cobalt supplies.

**Aircraft industry poised for growth - more cobalt required**

Boeing's has predicted that nearly half of the world's air traffic growth will be driven by travel to, from, or within Asia-Pacific over the next 20 years. In a recent report Boeing estimated airlines in the Asia Pacific region would require 12,820 new jets valued at \$1.9 trillion over the next two decades. Both Airbus and Boeing have committed to record production rates for their most popular models and Asia-Pacific carriers Air Asia and Lion Air have placed aircraft orders valued at billions of dollars.

Cobalt is an essential metal in high temperature super alloys used for casting airfoils and structural parts in jet turbine engines. Cobalt-based alloys have a relative high tolerance for thermal fatigue.

Typically a high bypass, turbofan jet engine (40,000lb thrust class) contains 50-60 kilograms of cobalt.

### **Difficulties along borders threaten cobalt trade in Africa**

At the DR Congo-Zambia border post of Kasumbalesa several truckers were recently killed and many say they are regularly threatened. Driver Alfred Ndlovu trucks cobalt from the DRC's mineral rich Katanga Province to South Africa twice a month. He has been doing this for five years but now he is considering giving up because he fears for his life every time he crosses the border. "The soldiers and police officers are supposed to protect us, not to punish us for refusing to give them bribes." Ndlovu told Ephraim Nsingo of the Inter Press Service News Agency.

The border is the DRC's main trade link and Kasumbalesa is Zambia's busiest border in terms of traffic volumes. The border handles an average of 600 trucks on a normal day and road conditions are often very poor. In 2012 Over 50% of world cobalt was produced from Katanga Province.



*Truck crews work on a muddy Katanga road in the DR Congo (photo courtesy of Stephen Graham/IRIN)*

### **Electricity supplies halt new DR Congo mine development**

Mine operators in the Democratic Republic of Congo have been told to cease any project expansion requiring additional grid electricity. The government of the DRC which produces over 55% of the world's cobalt has told mining companies to halt any project expansion requiring extra electricity amid a shortage that will take years to resolve.

The country is implementing an electricity-rationing program for operating mines and the state-owned power company has stopped signing new contracts. Miners have been told to immediately postpone all expansion projects requiring additional energy. It is unclear whether Glencore Xstrata Plc's Mutanda and Katanga Mining projects and Freeport-McMoRan Copper & Gold Inc.'s Tenke Fungurume mine will be affected. They are among the DRC's largest copper producers and mine a large portion of the world's cobalt.

The DRC is planning a huge hydropower project on the Congo river but this has yet to be funded and will take decades to complete. Less than 10% of DRC's population has electricity and much

of the country's current power production is going directly to mining companies in Katanga province.

### Hiccups in new smelter plan for Port Pirie

Belgium based Nyrstar has delayed a decision on its \$385 million Port Pirie lead smelter transformation project in South Australia and is seeking additional government concessions before final approval. Nyrstar is yet to complete due diligence needed to secure a \$180m guarantee. The SA government granted development approval for the Port Pirie transformation project last December subject to Nyrstar complying with twelve conditions for the construction and operation of the new plant. Last year, the government warned that if the transformation did not go ahead the smelter could close. The integrated multi-metals recovery plant employs over 700 people and produced 54,300 tonnes of sulphuric acid in 2013. It is closely amalgamated with Nyrstar's Hobart zinc smelter which produced about 400,000 tonnes of acid last year.

### Long history of sulphuric acid in South Australia

This news in the Barrier Miner (Broken Hill) on 17 August 1922 described the plans for acid production at Port Pirie.

*“Mr. H. St. John Somerset (general superintendent of the Port Pirie Smelting Works) stated on Monday (says a correspondent in the "Advertiser") that the Smelters Company, as agents for the Electrolytic Zinc Company, had started on the erection of a big contact sulphuric acid plant at Port Pirie. The first unit to be erected will be capable of producing daily 60 to 70 tons of 98%, sulphuric acid, and will cost approximately £80,000. It is intended that the acid shall be sold and transported to the superphosphate manufacturers at Port Adelaide, who are now using acid made from imported sulphur.”*

Perhaps history will repeat with the erection of a much larger plant near Broken Hill 95 years later.

### BPL outlined in Mining Chronicle feature

The Mining Chronicle newspaper featured Broken Hill Prospecting in its February 2014 edition (Vol.19, no.2, page 23). The full-page feature included an update on the Company's resources and planned sulphuric acid business as well as promotion of Broken Hill as an excellent base for future mine and chemical projects. A copy of the article is posted on BPL's website ([www.bhpl.biz](http://www.bhpl.biz)).

**BROKEN HILL PROSPECTING** **RESOURCES**

**Unlike any other town for mining**

**Diversity name of the game for cobalt junior**

**BY DANIELLE HANRAHAN**

Cobalt explorer Broken Hill Prospecting (BPL) will focus its efforts this year on marketing its chemical business, with the company exploring the foundations for a new sulphuric acid industry in eastern Australia.

The Sydney-based mining and exploration company launched Broken Hill Chemical as an

There is no better place in Australia than the historic mining town of Broken Hill to get a new project up and running, according to Dr Ian Pringle.

The managing director of cobalt explorer Broken Hill Prospecting (BPL) said the community in the outback NSW town, about 1100km west of Sydney, supported companies looking to develop new projects, with the council, residents and service providers geared towards new development.

## **Come to Broken Hill and meet the BPL team**

The Resources Investment Symposium will be held in Broken Hill between 25-28 May 2014 and BPL will have both a booth and presentation at this well attended annual event. This year, some outstanding speakers have been confirmed including Leigh Clifford (current Chairman of Qantas and Bechtel Australia and previous CEO of Rio Tinto).

The symposium is a terrific, low-cost opportunity to learn firsthand of mining and exploration developments and to network with many of east Australia's active mining executives as well as mining investors. I recommend that you visit the Symposium website to register for the event ([www.symposium.net.au](http://www.symposium.net.au)).

BPL's progress in the last three years has been quite extraordinary. From a small sub-economic cobalt deposit the Company's resources have been found to be very large and they offer the future opportunity to not only produce cobalt to supply growing electrical, transport and industrial markets but also to provide a local and reliable supply of sulphuric acid which may also present leverage for BPL to enter into other mineral industry projects.

I invite BPL Shareholders to consider the opportunity afforded by the current SPP to increase their investment in the Company and for other investors to consider the excellent potential the company offers as BPL's exciting project continues to grow and develop.

I anticipate making further announcements as our work progresses and look forward to meeting you at the Broken Hill Investment Symposium during late May.

Yours faithfully



Ian Pringle  
**Managing Director**

### Competent Person Statement

*Exploration activities and results contained in this letter are based on information compiled by Dr Ian Pringle, a Member of the Australasian Institute of Mining and Metallurgy. Dr Pringle is the Managing Director of Broken Hill Prospecting Ltd and also a Director of Ian J Pringle & Associates Pty Ltd, a consultancy company in minerals exploration. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). The Inferred Mineral Resource was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. The Potential is reported under JORC Code 2012. It is conceptual in nature and more drilling is required to further define it. However, there is no certainty that additional work will result in an upgrade of potential to Mineral Resource. Dr Pringle has consented to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

Estimate of Potential (Exploration Target)

*The estimate of Potential is based on exploration results. H&S Consultants Pty Ltd undertook a Mineral Resource Estimation (JORC 2004) for the Pyrite Hill, Big Hill and Railway cobalt-pyrite deposits with the assay and survey data collected from 66 percussion (RC) and diamond drill holes and both one and two metre sample intervals. The details of these studies are reported in ASX announcements by the Company on 14 November, 2011 and 27 July 2012.*

*Cross sections were constructed along the strike of the mineralisation and a model was built to define the hanging wall and footwall surfaces. Estimates were completed on blocks within the overall envelope using data from that volume. Composites were created and Inferred Resource estimates were completed using data occurring inside the mineralised envelope. The upper and lower contacts were easily identifiable from cobalt grades with the mineralisation generally corresponding to a sharp transition from low grade intervals to those above 500 ppm cobalt. The average of all composites inside the mineralised volume was 740 ppm cobalt. A specific gravity of 2.80g/cc was used.*

*After a 75x75x15 metres search size with between 10 and 32 two metre composites was used to estimate Inferred Resources the Potential was estimated on a search size of 150x150x30 metres designed to largely fill the modelled mineralised volume with cobalt estimates. Ordinary kriging based on two different resource estimation software packages was used.*

*Potential mineralisation lies outside of the Inferred Mineral Resource because of the absence of nearby drilling. By extending the search distance within the 3D mineralisation the model target size is between 37Mt and 59Mt at a grade between 1.70 – 1.85 pound per tonne cobalt. This target is approximate and conceptual in nature and more drilling is required to further define it. There is no certainty that this will result in a Mineral Resource.*

Proposed exploration activities to test the Potential

*The Company proposes to undertake close-spaced drilling of the areas defined as Potential and the planned drill holes will be spaced at about 50 metre centres and drilled to an average depth of approximately 150 metres. This drilling is planned during late 2014 and 2015 after the Company secures funding or a partner to assist with the work. Metallurgical test-work, mapping and outcrop sampling from throughout the deposits prior to the drilling will assist in locating future drill site locations.*

**For further information contact;**

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