# 🗱 🕺 MRL Corporation Ltd

30 September, 2014

## MRL Corporation Limited

ACN 007 870 760 ABN 50 007 870 760

### **Registered Office**

Suite 3 9 Hampden Road Nedlands WA 6009 Tel +61 1300 660 448 Fax +61 1300 855 044

### Directors

Peter Reilly Craig McGuckin Peter Youd Denis Geldard Peter Hepburn-Brown

### **Company Secretary**

Peter Youd

Email: info@mrltd.com.au

Website: www.mrltd.com.au

### **ASX Symbol**

MRF, MRFO, MRFOA

# MRL APPOINTS HIGHLY EXPERIENCED ENGINEER AS A NON-EXECUTIVE DIRECTOR

MRL Corporation Ltd (ASX: MRF) is pleased to advise that highly experienced civil engineer Joel Chong has been appointed as a Non-executive Director of the Company.

Mr Chong holds a Masters Degree in Science from Arizona State University and has provided engineering and sustainability consultancy services to numerous Australian resources companies with projects in Australia, Asia and Indonesia.

He has also assisted small and mid-cap resource companies doing business with Asian companies, especially in China, by using his networks in the resources industries throughout Singapore, Hong Kong, China and North America.

Mr Chong's contacts and experience have enabled him to help bridge the gap for many companies working across these regions.

MRL Managing Director Craig McGuckin said Mr Chong's skills and contacts would be invaluable as the Company advances its suite of high-grade graphite projects in Sri Lanka.

"The combination of Joel's engineering experience and his network of contacts in the region will be immensely helpful to MRL as we begin bulk sampling and prepare for commercial graphite production," Mr McGuckin said.

MRL also advises that Peter Reilly has retired as Chairman and a Nonexecutive Director of the Company. The Board thanks Mr Reilly for the strong leadership and strategic direction he has provided to MRL and wishes him all the best in his future endeavours.

# 🗱 MRL Corporation Ltd

### About MRL Corporation Ltd (ASX: MRF)

MRL is aiming to develop an underground mining operation to extract high-grade, crystalline vein graphite, which is unique to Sri Lanka. The Company holds exclusive rights to exploration licenses covering approximately 6,300 hectares in area, with historical workings located within nearly all license grids.

### About Graphite

Natural graphite occurs in three forms: amorphous graphite, flake graphite and the most rare and highest quality form being crystalline vein graphite. Sri Lanka is famed for being the only commercial producer of crystalline vein graphite (lump or Ceylon graphite), the highest quality of naturally occurring material in the world. The quality of vein graphite produced in the country has a purity level in excess of 90% TGC (Carbon as graphite) which means little upgrading and processing is required to make a high quality saleable product.

Amorphous (micro crystalline) graphite is the least pure form of naturally occurring graphite and commercial deposits usually have a carbon content of 70-85%, and are found as lenses or lumps with flat fracture cleavages. It is normally formed by metamorphism of previously existing anthracite coal seams.

Flake (crystalline) graphite is the more common form of graphite and typically has a carbon content in the range of 80-99%, and is usually formed in metamorphic rock in concentrations of 5%-12% of the ore body. Mining and processing of these deposits is similar to an open pit gold or copper mine, requiring 'large scale' mining and processing to extract the graphite. Large-scale mining and processing plants typically equates to high capital expenditures and relatively high operating costs.

Vein (crystalline) graphite is the purest form of graphite with TGC grades typically >90%, with some grade as high as 99.5% TGC. Mining vein graphite may be considered analogous to high-grade gold vein mining, requiring considerably less capital expenditure when compared to large-scale open pit mining. That is, development, mining equipment and processing plants will be of a significantly smaller scale. Operating unit costs will also be lower than those for typical large-scale open pit mining.

#### Nature of vein graphite

Sri Lankan graphite deposition model is best described from the 'bottom up': tension fractures formed in the metamorphic sediments, caused by the folding of the sediments, creating 'conduits' for the hydrothermal deposition of high quality vein graphite. Historically, mining of these veins has found the veins generally increase in thickness and grade quality with increasing depth. Graphite veins generally dip steeply at  $-70^{\circ}$  to near vertical, enabling 'narrow vein' extraction mining techniques similar to those used on narrow vein, high-grade gold deposits. The method commonly used is an overhead retreat stoping technique where the high-grade vein graphite is mined and hauled to surface without contamination. The graphite selvages, in contact with the surrounding waste, is hauled to surface and stockpiled for upgrading. The balance of the waste is used to fill the floor of the stope.

Due to the nature of the vein graphite, it is anticipated vein widths of ~25cm, using narrow vein mining techniques can be economically extracted from underground operations.

The comparison chart below illustrates comparative 'metal equivalent' grades of precious metals with their assumed metallurgical recoveries as compared to Sri Lankan vein graphite.



#### For further information:

## Craig McGuckin Managing Director

MRL Corporation Ltd

Peter Youd Executive Director MRL Corporation Ltd

www.mrltd.com.au