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## 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**

Craig McGuckin
Peter Youd
Denis Geldard
Peter Hepburn-Brown
Joel Chong

### **Company Secretary**

Peter Youd

Email: info@mrltd.com.au

Website: www.mrltd.com.au

### **ASX Symbol**

MRF, MRFO, MRFOA

# MRL doubles its holding of high-grade Sri Lankan graphite acreage

MRL Corporation (ASX: MRF) is pleased to report more success with its strategy to become a major high-grade graphite producer in Sri Lanka, agreeing to acquire an extensive parcel of tenements hosting graphite mineralisation and historic workings.

The new exploration licences cover 5,600 hectares, effectively doubling MRL's total land holding in Sri Lanka.

The acquisition agreement is subject to the completion of due diligence by MRL, including inspection of the historic workings and the areas of known graphite mineralisation.

Under the agreement, MRL will issue 3,000,000 MRL shares to the vendor as payment. These shares will be subject to escrow for a period of 24 months from the time of issue.

MRL will issue a further 3.6 million MRL shares upon either the first conversion of one of the new exploration licences to a mining licence or the second anniversary of the issue of the first shares, whichever comes first.

The new tenements add to MRL's growing portfolio of high-grade graphite assets in Sri Lanka.

Metallurgical tests are currently underway on bulk samples from MRL's Aluketiya and Warakapola Pandeniya high-grade graphite projects as part of the Company's plan to fast-track production and cash flow.

MRL is also refurbishing selected shafts at Pandeniya for underground exploration and at the Aluketiya Mining License to commence mining. Application is also being made to convert the Pandeniya area to an Industrial Mining Licence.

MRL believes it will be in a position to start ramping up commercial production later next year.

# About MRL Corporation Ltd (ASX: MRF)

MRL is aiming to develop an underground mining operation to extract highgrade, 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.

For further information:

Craig McGuckin
Managing Director
MRL Corporation Ltd

Peter Youd Executive Director MRL Corporation Ltd

www.mrltd.com.au