## 3 December 2012

### **Richland Resources Ltd**

## ("Richland" or "the Company") (AIM: RLD)

#### **Commences Evaluation of Graphite Production Restart, Tanzania**

# Highlights

- Proposed restart of graphite mine on existing Tanzanite licence area
- Historic capacity
  - 8,000 tonnes of graphite concentrate previously produced
  - Total historic, non JORC compliant resource of 25million tonnes at 6.9% carbon ("C")
  - Historic, non JORC compliant reserves of 7.6million tonnes at 5.5-11.2% C, containing 530,000 tonnes of graphitic carbon
- Feasibility study underway following discussions with 3<sup>rd</sup> parties and research into the current graphite market
  - 6,000 tonnes of graphite carbon available on-surface from waste dump extracted from the existing tanzanite mining operation
  - Study to assess potential of graphite operational synergies with current tanzanite mining operations which are 1km away
  - Based on current graphite process, Company believes there is potential for positive cash flow generation, with manageable capital expenditure as synergies from existing infrastructure available

Richland Resources Ltd, the gemstone producer and developer, today announces that it has commenced a feasibility study to evaluate restarting production at the Merelani Graphite Mine located within the company's existing Block C licence area, where the Company has mined tanzanite since 2004. Historically, the licence area hosted the producing Merelani Graphite Mine until closure of the operations in 1998..

At the time of the closure of the Merelani Graphite Mine, flake graphite prices were between US\$480 to US\$550 per tonne. Despite the recent softening of graphite prices, flake graphite continues to fetch over US\$2,500 per tonne. Graphite is a carbon mineral with a highly conductive nature and a range of uses including within refractories, steel making and batteries. Since 2010, Richland has pursued a mining optimization and cost control programme that has returned the Company to profit and established a solid financial base. In the current financial market, the Board believes that value is best achieved from realization of economically viable production, achieved through low capital expenditure. The feasibility study will not only examine the viability of re-developing open-pit graphite operations but also assess the opportunities presented from the graphite ore contained within waste from the tailings of tanzanite mining operations, which the Company estimates may be up to 6,000 tonnes subject to testing.

A historic feasibility study at Merelani undertaken in 1992 by SAMAX determined a Measured Resource, at an open pit depth of up to 50 meters, of 25m tonnes assaying 6.9% Carbon ("C"), located within the Upper Horizon using a 5% C cut-off. Using a 7% Carbon cut-off, the Measured Resource at a depth of 40m was calculated to contain approximately 5.4m tonnes assaying 10.1 % C. Proven reserves for the project at that time were reported at 7.6m tonnes of graphite ore grading 5.5 – 11.2 wt% C, containing 530,000t of graphitic C. These figures do not take into account mine production of around 8,000t in the period from 1992 to closure of the Merelani Graphite Mine and are non-JORC compliant.

Commenting on the announcement, Chief Executive Officer, Bernard Olivier said: "Having re-established profitable production at our tanzanite mining operations we are looking at the graphite mine as a low cost source of revenue and positive cash flows. Located within our existing licence area, 1 km from current tanzanite mining operations, there are several potential partnerships available to develop both a tailings reclamation operation and restart the open pit graphite mining operation. Graphite is a specialist market and we have initiated a feasibility study, following on from discussions with parties interested in securing a long-term source of material. Our intention is to build shareholder value from a profitable production portfolio with minimal costs."

### **Project Background**

As part of the Company's growth and diversification plan into other gemstones and associated minerals that was initiated in 2011, the Company has commenced a feasibility study with a view to restarting the Block C Merelani Graphite Mine. Graphtan Limited ("Graphtan"), a company managed by SAMAX, began its mining

operations in 1995 and produced 6,776 tonnes of graphite in the full year of production in 1996. Sufficient reserves were initially identified for a 40-year operation at a mining rate of 15,000 tonnes per annum of high-grade flake graphite of 97-98% purity. The mine, however, ran into financial problems in 1997, and the last shipment of remaining stockpiled ore was made in February 1998.

At the time of the closure of the Merelani Graphite Mine, flake graphite prices were between \$480 to \$550 per tonne. Despite the recent softening of graphite prices, flake graphite prices currently command over \$2,500 per tonne.

#### **Historic Graphite Resource**

An historic prefeasibility study at Merelani undertaken in 1992 on the Block C Graphite determined a Measured Resource, at an open pit depth of up to 50meters, of 25m tonnes assaying 6.9% C, located within the Upper Horizon using a 5% C cut-off. Using a 7% C cut-off, the Resource at a depth of 40m was calculated to contain approximately 5.4m tonnes assaying 10.1 % carbon. Proven reserves for the project were reported at 7.6 tonnes of graphite ore grading 5.5 - 11.2 wt% C, containing 530,000 tonnes of graphitic C. These figures do not take into account mine production of around 8,000t in the period from 1992 to closure of the Merelani Graphite Mine and are non-JORC compliant.

# Graphite bearing waste dump

The Company has mined more than 200,000 tonnes of ore material from its tanzanite mining operation during the last 6 years. In addition to the ore material extracted from the mine, the Company also mined approximately 100,000 tonnes of non-tanzanite but graphite bearing "waste" material that constitutes the hanging and footwall of the tanzanite ore-zone. The tanzanite waste material has been dumped on the Company's property and the tanzanite waste is effectively a graphite stockpile which the Company estimates may contain approximately 6,000 tonnes of graphite ore. The exact tonnes and quality of the graphite within the waste dump will be calculated as part of the current feasibility study.

#### **Graphite Quality**

Mean grain size composition of graphite flakes produced from the Block C Graphite mine is approximately 35% > 300 ym, ca. 35% at 150 - 300 ym and about 30% < 150 ym. Graphite concentrates from the Block C mine returned an apparent density of 580-620 g/l, and contained 2.1-3.1 wt% H2O and 98.66-98.67 wt% graphitic C.

#### Mine Infrastructure and Database

The Company acquired the Block C tanzanite and graphite mine in 2004 from African Gem Resources Limited ("AFGEM"), who in turn acquired it from Graphtan. The graphite mining operation and plant were modified by AFGEM to focus on tanzanite extraction only. However, significant infrastructure and equipment originally installed for the extraction and processing of graphite still exist and are currently partly in use for the Company's tanzanite mining operation. The Company currently has over 650 employees and well established infrastructure on the same property, including offices, accommodation, engineering facilities, water, electricity, haulage roads and a tanzanite processing plant.

Richland currently has a wealth of technical and management personnel on site, including several geologists and mining engineers, as well as several employees and senior management, including the plant manager and chief geologist, who previously worked for Graphtan Ltd, and thus have a significant skill base in the extraction and processing of graphite from this deposit. The Company also has copies of the database that covers all aspects of the mining operation including diamond drill holes, core logs, geology reports, survey maps, resource estimations, graphite quality analyses, processing data and flow sheets, as well as processing and mine production and sales reports.

# Graphite deposit

The Block C Merelani graphite deposit occurs in parallel northeast trending horizons (040 - 045 degrees) with very consistent compositional layers dipping at 35 - 40 degrees northwest. The exposed portion of the upper horizon is 220 meters wide and 1100 meters along strike.

The lithological units for resource evaluation, all in the upper horizon are as follows:

- FL2 flaggy graphitic gneiss unit 2
- K3 graphitic kyanite gneiss unit 3
- FL1 flaggy graphic gneiss unit 1
- K2 graphitic kyanite gneiss unit 2
- MAZ main alteration zone/ graphite calc-silicate schist
- K1 graphitic kyanite gneiss unit 1

The rocks were mapped over hundreds of meters of strike in out crop ridges and exploration trenches and show up to 90 meters of dip length between surface and drill hole intersections.

K1, K2 and K3 are fresh, resistant weathering, often massive, coarse-grained rock hosting premium quality graphite with larger flakes, clean shining, and of higher grade. Graphite content of 6-7%Cg on average occurs as clean 1- 4 millimetre - scale crystalline flakes with a relative uniform grade distribution in graphitic kyanite gneiss.

The flaggy graphitic gneisses FL1 and FL2 lie above K2 and K3 and are also fresh. Graphite content range between 3 - 6%Cg as flake aggregates with flake size somewhat smaller than for the graphitic kyanite gneiss units.

The MAZ unit comprise at least two different rock types and due to this has higher graphite content 12 - 24%Cg, but of low purity. Mapped over about 1 km but varies from 5 – 32 meters thick in the plane of the sections.

# **Qualified Person**

Dr. Bernard Olivier has reviewed and approved the technical information contained within this press release in his capacity as a competent person, as required under the AIM rules for Companies. Dr. Olivier is a Member of the Australasian Institute of Mining and Metallurgy.

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Further information is available on the Company's website: www.richlandresourcesltd.com

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