North River Resources plc / Ticker: NRRP / Index: AIM / Sector: Mining 30 June 2014

# <u>North River Resources plc</u> ("North River" or the "Company")

# Namib Project - Mine Development Plan

North River is pleased to announce the completion of the Mine Development Plan ("MDP") for its Namib Lead and Zinc Project ("the Project") in Namibia, a copy of which can be viewed on the Company's website. The MDP demonstrates that the Project has good economics based on the current Mineral Resource.

The current Mineral Resource has yet to be converted to reserves and is not adequate to complete a feasibility study compliant with JORC 2012 guidelines. Accordingly, at the Company's request, the MDP has been prepared to the same standards as a feasibility study (i.e. +/-15% of costs) based on a Mineral Inventory, incorporating both Indicated Resource and portions of the Inferred Resource, and provides a good indication of the economics of developing the mine.

The MDP sets out an estimated payback on the Project for a 250 kilo tonnes (kt) per annum plant of just 1.4 years, based on a Mineral Inventory of 425 kt of Indicated Resource, and 234 kt of Inferred Resource.

The MDP also includes an updated Mineral Resource statement as at March 2014, which shows a small increase over the December 2013 estimate announced previously, as shown in the table below. Drilling underground has been delayed by a series of mechanical breakdowns of the larger of the two drills. However, the resource expansion programme has now been accelerated by mobilizing a third drill. An exploration tunnel is also being excavated 150 meters below surface, under the Northern lodes, to provide additional drill pad locations. In due course the Company anticipates announcing an updated Mineral Resource, which together with this Mine Development Plan will produce a JORC compliant feasibility study.

Tonnes and Grade at 1% Pb + Zn Cut-off Grade						
Class	Area	*Tonnes	Density	Pb	Zn	Ag
			(t/m³)	(%)	(%)	(g/t)
	Northern Extension	529,000	3.45	2.8	5.4	48.2
Indicated	South Mine	139,000	3.45	2.0	4.3	42.4

	Northern Extension	253,000	3.45	1.8	7.2	39.0
Inferred	South Mine	7,000	3.45	2.2	3.5	53.4
Total		928,000	3.45	2.4	5.7	44.9

\* Tonnages have been rounded to the nearest 1,000t to reflect an estimate

As announced previously, the completion of the feasibility study had also been delayed by lock-cycle metallurgical testing, which most accurately simulates the plant process. This work has now been completed. A Zinc recovery of 78% was attained at a grade of 51% and Lead recovery of 82% was attained at a grade of 54%.

### Highlights of the MDP

Based on 660 kt of ore mined based on the current estimate of life of mine, the cash flow model generated the following (after tax) financial statistics:

Pre-Production Capex	USD Million	25.2
Revenue	USD Million	93.8
Cash Outflow	USD Million	75.2
Net Cash Flow	USD Million	18.6
NPV8%	USD Million	12.4
IRR	%	38
Payback	Years	1.4

Pre-Production Capital Cost Estimate

Capital Item	USD Million	
Process Plant	14.540	
EPCM	2.687	
Contingency (12%)	2.055	
Ventilation	0.385	
Mining infrastructure	3.998	
Mine development	1.559	
Total	25.224	

### **Project Development**

The Project's location benefits from ready access to existing infrastructure, which means the mine can be constructed with a low capital cost. The Company hopes to make further reductions in both the Capex and time-lines for the Project.

Ore will be accessed via the two existing declines. High-grade ore is ready to be mined with minimal capital development required. The mine will be developed and ore extracted using hand held techniques, with simple technologies being utilized to keep both capital and operating costs down. Southern Africa in general has a long and successful history of mining using hand held equipment. A skilled, low cost workforce with the necessary expertise is readily available.

The MDP illustrates mining and processing a total of 250 kt of lead, zinc and silver bearing ore per annum. Due to the nature of the ore and host rocks, the process plant flow sheet has been designed with simplicity in mind. The flow sheet consists of single stage crushing, followed by a 450kW ball mill, feeding into a sequential lead and zinc flotation circuit. No thickening of the concentrates is required, with the flotation circuit feeding directly into the filters.

The concentrates will be transported 70km by road or rail to Namibia's main port of Walvis Bay for export. The port facility has a bulk concentrate ship loading facility available.

A tailings dam, constructed at the site in the mid-1990s, will be refurbished at minimal cost. The dam has been designed to accommodate 1.5 million tonnes of tailings material, equivalent to around seven years life of mine.

Minor refurbishment is required to the existing 22kV power line, which connects the operation to the national grid. Water supply is available from the local water authority. A new small diameter 7km water line will be installed.

No camp is required, as the workforce will be housed in the local town of Swakopmund, 30km from the operation from where staff will be transported to site by bus. The towns of Swakopmund and nearby Walvis Bay are already servicing multiple mining operations (Husab, Langer Heinrich, Rossing). In addition, the port of Walvis Bay is utilized for the import and export of all supplies and products, for the majority of mines in Namibia. All the necessary services for the Project are well catered for.

The Resource expansion programme is being accelerated. The Project currently has three diamond drills operating on site. Drilling is targeting the deeper untested zones beneath the Southern and Northern lodes, which, the Directors believe, show potential to add to overall Resources. The Company's smaller Kempe drill is being used for converting existing Inferred Resources to a higher resource classification.

Following the completion of the scheduled drilling in progress, an updated Mineral Resource will be estimated. North River is confident that significant increases to its Resources will be forthcoming. These increases will further enhance the economics of the Project.

A copy of the full Mine Development Plan has been posted on the Company's website: <u>www.northriverresources.com</u>, under "operations" and then "Namib Lead Zinc". The home page of the website also has a "virtual site visit" video which provides a project overview.

The files located on the website consist of following documents

Mine Development Plan Snowden Group Underground Mining Summary Geotechnical Study Ventilation Study Mining Infrastructure and Utilities Financial Analysis Appendices

Processing Study Tenova Bateman. Volume 1 – Study Documents NRR Opportunity Statement

Martin French Managing Director of North River Resources said, "The Mine Development Plan is a Feasibility Study standard document with the exception that it does not include reserves. Much of the inferred resources used in the MDP's Mineral Inventory, are currently being drilled with the objective of up-grading them to indicated resources, which can then be converted into reserves and hence a full Feasibility Study. The 1.4 year payback provides a good indication the Namib project can quickly become profitable. It provides encouraging economics, especially if the mine life can be extended over time with deeper drilling and near-mine exploration. Planning is well advanced to bring Namib back into production and the Company is now turning its focus to project funding."

#### \*\*ENDS\*\*

For further information please visit <u>www.northriverresources.com</u> or contact:

Martin French	North River Resources Plc	Tel: +44 (0) 20 7930 6966
Andrew Emmott Ritchie Balmer	Strand Hanson Limited	Tel: +44 (0) 20 7409 3494
Will Slack	Pareto Securities Limited	Tel: +44 (0) 20 7786 4370
Andrew Monk Andrew Raca	VSA Capital Limited	Tel: +44 (0) 20 3005 5000
Susie Geliher Elisabeth Cowell	St Brides Media & Finance Ltd	Tel: +44 (0) 20 7236 1177