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

26 November 2014

North River Resources plc ("North River" or "the Company")

Definitive Feasibility Study Demonstrates Robust Economics of Namib Lead Zinc Silver Mine

North River Resources is pleased to announce the completion of the Definitive Feasibility Study ("DFS" or "the Study") for its brownfield Namib Lead Zinc Silver Mine ("NLZM") in Namibia.

Highlights:

- Maiden Mineral Ore Reserve of 585,000 tonnes at 6.2% zinc, 2.9% lead, and 46ppm silver
- Robust economic model with strong IRRs at consensus metal prices
- Further significant cost savings and improvements to the economic model are anticipated as the project moves to the implementation phase
- 13 month schedule to bring mine back into production
- Annual throughput of 250,000 tonnes at an average grade of 9% (Pb+Zn) producing 19,100 tonnes of metal in concentrate
- 280,000 ounces per annum silver by-product
- Initial mine life of 3.5 years (including ramp up and ramp down) and resources equivalent to five years of mine life
- The resource expansion programme is continuing and it is anticipated that the mine life will grow further over the coming year

North River Managing Director Martin French said, *"The DFS is a major milestone for NLZM and North River. The Study has gone through an exhaustive process and the project economics are strong. While the mine-life is short, so is the pay-back, as much of the major infrastructure is already in place at NLZM. From known geology, there are good indications that the mine life may be extended, while many deeper and near-mine regional areas have yet to be explored. We are therefore hopeful that the value of the project will grow over the coming year and beyond. Underground drilling continues and a near-mine exploration programme is planned to commence next year. The Company is now advanced on working up the Project Execution Plan for NLZM. The Board will soon formerly review the DFS and implementation planning."*

The DFS was signed off by CSA Global (UK) Ltd who were responsible for the compilation of the Study, as well as the geology and mineral resource estimates. Bara Consulting Ltd updated the mine design and schedule previously undertaken by Snowden Group and subsequently produced a Mineral Reserve Statement. Tenova Mining and Minerals were principally responsible for the sections on Mineral Processing and Metallurgy.

The DFS confirms that the project is technically low risk and economically robust. The strong post-tax IRR (>50% over the life of mine) and short payback period justify the development of the project. Following a successful drilling programme, total underground resources are now 1.25 million tonnes, equivalent to a five year life of mine. Further underground drilling continues to progress well, with a

regional exploration programme due to start soon. North River believes NLZM will, in due course, support a significantly longer mine life.

Two cash flow models were produced; one based only on the initial reserve, the other considering all resources as a life of mine ("LOM") plan. The cash-flow model provided the overall project financial forecast after taxation. The economic highlights are:

Financial Metrics	Unit	Resource Value	Reserve Value
EBITDA*	USD'000	79,083	59,905]
Net Cashflow*	USD'000	34,546	20,775]
Pre-Tax NPV (8%)	USD'000	50,259	31,171
Pre-Tax IRR	%	65	45
Post-Tax NPV (8%)	USD'000	24,773	13,798
Post-Tax IRR	%	52	34
Operating Margin	%	64	65
Payback Period	months	12	15

The above financial metrics are for the 100% owned Namib project an assume the project commences Q1 2015, following the receipt of the Mining Licence, with first production 13 months later. Sales price assumptions for the metals were $2,400 pt for zinc, $2,300pt for lead and $21p oz for silver

History and Existing Infrastructure

NLZM was operated as the Deblin Mine between 1968 and 1991. It was abandoned by its owners in 1992 and remained idle until its acquisition by Kalahari Minerals in 2007. In 2009 North River Resources acquired the Project and began an investigation into its reopening.

NLZM has well-established infrastructure. A 22kV power line extends to the mine site. Small refurbishments are required prior to re-energising the line. An 8km all weather access road extends from the Trans Kalahari highway to the mine site. Water supply will come from the pre-existing takeoff point of the pipeline administered by the Namibian parastatal Namwater. A 7.5km HDP (high density polyethylene) pipeline is to be installed to replace the historic line. A tailings dam has also been constructed to support a six to seven year mine life.

Namibia's largest port of Walvis Bay is located 70km from the site. Services and suppliers are well established in Walvis Bay and Swakopmund, reducing the requirement for reliance on other nearby countries.

NLZM has been fully refurbished to allow access to all underground areas, which extend to 220m below surface. Pumping systems, primary ventilation and all services have been reinstalled, allowing exploration and development activities to recommence. A video tour of the mine and its infrastructure

can be found on the home page of the Company's website.

Geology and Mineral Resources

CSA Global completed a JORC 2012 compliant Mineral Resource Estimate, on which the mine plan and Reserves are based.

The NLZM is hosted within the thinly interbedded clastics and carbonates of the Arises Marble unit of the Karibib Formation of the Swakop Group, which in the vicinity of the mine displays complex folding and deformation. The mineralised massive "Mine Marble" unit within the Karibib Formation is a weakly banded and coarse grained marble.

Structurally, mineralisation occurs in NE-SW striking tabular lodes that occur in the axial zone and limbs of a ductile SW-plunging anticlinal fold closure. The lodes have similar orientation around the fold closure and are therefore not folded. They are stratabound within the host Mine Marble unit but are very oblique to this enclosing envelope. As a result, the lodes typically have short strike lengths but much greater down-plunge continuity. Lodes do occur which are elongated along the Mine Marble strike, but this is less common.

The lodes within the deposit are assigned to four zones relative to their position in the fold closure, the North, South, N20 and Junction.

In-situ Classified Mineral Resource Estimate for the NLZM, depleted, as at August 2014.

NLZM Minerals Resource Estimate as at 29th August 2014 Reported at a lower cut-off grade of 1% Pb% + Zn%						
Class	**Area**	**Tonnes**	**Density t/m³**	**Pb%**	**Zn%**	**Ag g/t**
Indicated	North	730,000	3.65	2.8	6.2	45.1
	South	147,000	3.61	2.1	5.3	40.5
Inferred	North	121.000	3.63	0.7	9.3	29.6
	South	251,000	3.69	2.7	6.6	48.2
Total		**1,250,000**	**3.65**	**2.5**	**6.5**	**43.7**

Tonnages have been rounded to the nearest 1000 t to reflect that this is an estimate. Apparent differences may occur due to rounding.

Mr Galen White, CSA Global, is a Fellow of the Australasian Institute of Mining and Metallurgy ('FAusIMM') and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Mineral Resources' (JORC Code 2012 Edition). Mr Galen White

consents to the inclusion of such information derived from the DFS, in the form and context in which it appears in this release.

Mining and Ore Reserves

The mining capital and operating estimates were prepared by the Snowden Group (April 2014), with a review and update undertaken by Bara Consulting (Oct 2014).

In early 2013, North River initiated studies to feasibility level based on the existing Inferred and Indicated resources at NLZM. However it was quickly determined that insufficient resources were defined to generate a viable economic model.

North River Resources began a surface and underground exploration drilling program in Dec 2013 in order to increase the resource base and confidence levels. Based on the success of this drilling, a new JORC 2012 compliant resource statement was published on 19 September 2014. A review and update of the mine design was then undertaken, which provided a robust economic model that supports North River Resources' maiden Mineral Ore Reserve.

Mineral Inventory Estimate (Bara Consulting)

Classification	**Tonnes**	**Zn%**	**Pb%**	**Ag ppm**	**Contained Zn (t)**	**Contained Pb (t)**	**Contained Ag (oz)**
Probable Ore Reserves (from Indicated Resources)	585,000	6.2	2.9	46	36,000	17,000	862,000
From Inferred Resources	229,000	6.1	1.7	37	14,000	4,000	276,000
Total Mining Inventory	**814,000**	**6.1**	**2.6**	**43**	**50,000**	**21,000**	**1,138,000**

Notes:
Probable Ore Reserves are the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined.

Inferred Resources, included in the table above will be mined as part of the extraction process, however do not form part of the Ore Reserves.

Bara Consulting is of the opinion that the classification of Probable Ore Reserves as reported herein meets the definitions of Proved and Probable Ore Reserves as stated by the JORC Code (2004)

Measured and Indicated Mineral Resources that are not Ore Reserves have not demonstrated economic viability.

All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.

Mr Pat Willis, Bara, is a Fellow and Past President of the Southern African Institute of Mining and Metallurgy ('SAIMM') and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify, through reciprocity, as a Competent Person in terms of the 'Australasian Code for Reporting of Ore Reserves' (JORC Code 2012 Edition). Mr Pat Willis consents to the inclusion of such information derived from the DFS in the form and context in which it appears in this release.

Mr Dick Joubert, Senior Project Manager - Tenova, is a Professional Engineer of the Engineering Council of South Africa ("ECSA") and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Ore Reserves' (JORC Code 2012 Edition). Mr Joubert consents to the inclusion of such information derived from the DFS, in the form and context in which it appears in this release.

Mining methods will follow the traditional practices of the project with the exception that truck and loader haulage will be utilized. Both declines are to be stripped to accommodate a larger mobile fleet. Long hole open stoping and shrinkage stoping are the primary extraction methods. As mining is predominately hand held, it allows the flexibility of alternative mining methods to be used as required, where geometry of the ore changes.

Processing

The process route is based on simple bulk Crushing, Milling followed by Lead then Zinc Flotation. The finalised flowsheet was developed from existing flowsheet operating information and a detailed integrated metallurgical testing program carried out on a bulk sample of material supplied to Mintek in South Africa. The testwork programme was supervised and directed by Tenova based in South Africa over a seven month period. The results from this process have been used to design the final flowsheet.

The flowsheet employs simple and proven processing technologies. The DFS flowsheet will use a Jaw and Cone crusher arrangement to produce a -15mm mill feed material. The Mill will operate in closed circuit with a Cyclone. Cyclone overflow material at a grind size of 80% passing -74um will report to a conditioning tank prior to flotation and Cyclone underflow material will return back to the mill.

Once the slurry has been conditioned the material will report to the flotation circuit. The flowsheet will use both Rougher and Scavenger flotation as well as cleaner and re–cleaner flotation to achieve the correct concentrate specification. A duplicate circuit will be used for both Lead, which is floated first and Zinc. The bulk of the silver credits will be found in the lead concentrate. A lead recovery of 93% with a grade of 68% and a zinc recovery of 85% with a grade of 51% was achieved during locked cycle testwork.

Concentrates from both the Lead circuit and the Zinc circuit will report to their respective Plate and Frame filter presses for de watering before being loaded into trucks for shipment to Port.

The tail from the flotation circuit will report to a tailings thickener for water recovery prior to being pumped to the already established tailings dam. Water from the tailings dam will be recovered and report back to the process water tank at the mill.

The capital cost for the process plant and associated infrastructure including water and electrical supply is estimated at US$18.43 million. This cost is inclusive of all infrastructure and indirect costs required to deliver the process plant and all associated infrastructure.

Summary of Capital Costs (+/- 10% Nominal Accuracy)

Capital Cost	**LOM Total '000**	**Reserve Total '000**
Surface Infrastructure	$ 798	$ 798
Underground Infrastructure	$ 765	$ 764
Process Plant	$ 18,439	$ 18,439
Mechanised Equipment	$ 1,755	$ 1,755
Mine Development	$ 6,022	$ 6,240
Total Capital Cost	**$ 27,780**	**$ 27,996**

Operating Costs

The average LOM operating cost is estimated at US$49.46 per tonne of ore during steady state operations that follow two months of commissioning ramp up. These costs are based on the treatment of an average of 250,000 tonnes of ore per annum producing over 6,000 tonnes of Lead, 12,500 tonnes of Zinc and 280,000 ounces of Silver.

Operating costs were developed in conjunction with the project design criteria, process flow sheets, mass balance, mechanical and electrical equipment lists developed by Tenova and in-country labour cost data provided by North River Resources.

Cost Centre	**LOM Cost '000**	**Cost/Tonne**	**Reserve Cost '000**	**Cost/Tonne**

Mining	$ 17,971	$ 22.08	$ 13,774	$ 23.53
Processing Plant	$ 15,352	$ 18.86	$ 11,041	$ 18.86
Concentrate Transport	$ 6,940	$ 8.53	$ 4,991	$ 8.53
Total Operating Cost	**$ 40,263**	**$ 49.46**	**$ 29,806**	**$ 50.92**

****ENDS****

For Further Information please 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
Susie Geliher Elisabeth Cowell	St Brides Media & Finance Ltd	Tel: +44 (0) 20 7236 1177