

7 October 2020

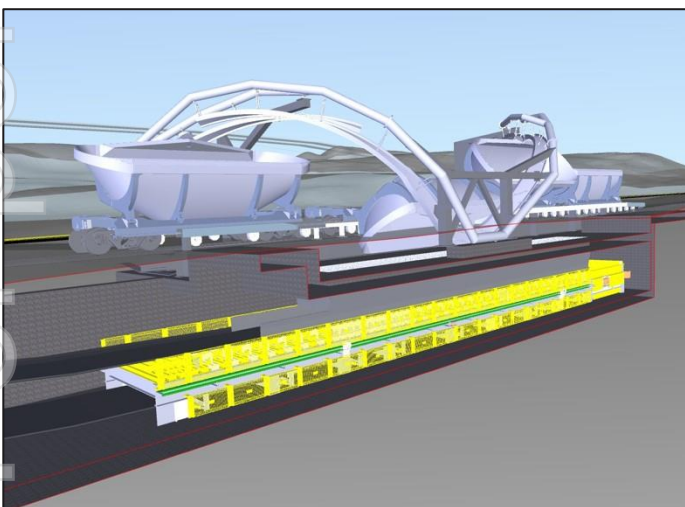
Further Progress on 'Route to Market' for Lake Giles Iron Project

- RCR Mining Technologies ("RCR MT") completes engineering design report to support the potential development of a cutting-edge 'Helix' rail car unloading solution ("Helix Dumper") at the Port of Esperance
- Process for selection of a preferred development option for the new rail unloading infrastructure system is now ready to advance
- Proposal for development of a Commercial Track Access Agreement for below rail network paths to Port of Esperance received from Arc Infrastructure in July
- Discussions progressing with above-rail service providers on indicative pricing for rail haulage services
- Advancing with Crown Lease application to support previously announced proposal to develop a 93km haul road from the Project to a proposed rail siding adjacent to the Perth to Kalgoorlie rail line at Jaurdi
- Macarthur now focused on advancing discussions with Southern Ports Authority to secure a pathway to conditional capacity allocation at Port of Esperance. This will be the final material piece of the rapidly emerging 'route to market' solution for Macarthur's Lake Giles Iron Project

Macarthur Minerals Limited (TSX-V: MMS) (ASX: MIO) (OTCQB: MMSDF) (the "Company" or "Macarthur") is pleased to provide an update on the continued progress towards completion of route to market for its flagship Moonshine magnetite deposits at Macarthur's Lake Giles Iron Project ("Project").

ENGINEERING DESIGN REPORT FOR CUTTING EDGE 'HELIX' RAIL UNLOADING SYSTEM COMPLETED

Following the recent engagement of RCR Mining Technologies Pty Ltd ("RCR MT") to examine the potential to develop and utilise a cutting-edge rail unloading technology at Esperance Port (See the Company's recent announcements dated 29 July 2020 [here](#) and 2 September 2020 [here](#)), RCR MT has now completed its engineering design report.



'Helix Dumper' conceptual design. (Image reproduced with permission from RCR MT)



Conceptual example of 'Helix Dumper' in operation. Image is not a representation of actual infrastructure at the Port of Esperance. (Image reproduced with permission from Kiruna Wagon & RCR MT)

Premium Australian iron ore

Macarthur Minerals Limited | ABN 93 103 011 436 | ASX: MIO TSX-V: MMS

www.macarthurminerals.com
communications@macarthurminerals.com



RCR MT, a subsidiary of NRW Holdings (ASX: NWH), holds an exclusive license to develop the Helix Dumper system in Australia and in combination with Kiruna Wagon, have the ability to manufacture both the dumper and wagons in Western Australia. RCR MT was engaged by Macarthur to examine the potential to utilise the cutting-edge rail unloading technology that has been successfully used in Scandinavian magnetite operations for several years.

RCR MT's Engineering Design Report has been provided to key stakeholders including Southern Ports Authority and Arc Infrastructure for review. Following completion of the review process, which is intended to bring clarity to a preferred infrastructure operating model that could potentially be adopted within the Port, Macarthur anticipates that an optimised rail unloading infrastructure solution is capable of being selected for development.

If constructed, the new Helix Dumper rail unloading system has the potential to optimise the existing capacity of the Berth 3 ship-loader enhancing its current performance from 2,200tph to approximately 4,500tph. With a design capacity potential of up to 25,000tph, RCR MT and Macarthur are confident that the Helix Dumper system can easily increase iron ore through-put at the Port.

Macarthur's proposal to develop the rail unloading infrastructure solution at Esperance Port:

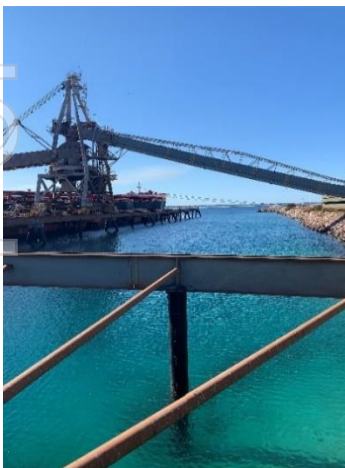
- does not require material capital contributions from the Port or the Western Australian State Government; and
- is intended to permit third party access to latent capacity within the Helix Dumper system, supporting important principles of open access.

If constructed, the Helix Dumper system has a design capacity which will be capable of handling tonnages well in excess of Macarthur's immediate requirements for the Lake Giles Iron Project, thereby providing the potential for increased trade through Esperance, subject to capacity elsewhere within the Port.

PORT OF ESPERANCE – PATHWAY TO CAPACITY ALLOCATION

In parallel with the examination of a suitable infrastructure operating model at the Port, Macarthur is continuing to engage with Southern Ports Authority on its requirements for providing Macarthur with a staged pathway to securing a binding capacity allocation.

With the continued positive and collaborative engagement being provided by Southern Ports Authority, Macarthur has confidence in the potential to achieve a contractual pathway to a capacity allocation that will be sufficient to support the Company's current Feasibility Study for the Lake Giles Iron Project.



Berth 3 Shiploader, Port of Esperance



Entrance to Port of Esperance



Berth 3 Shiploader, Port of Esperance



ABOVE RAIL (RAIL HAULAGE) SERVICES

Macarthur is in advanced discussions with above rail service providers on indicative pricing for rail haulage services from its proposed rail siding to the Port of Esperance. The Company is confident that it can secure rail tasks and indicative pricing on competitive terms. This will enable Macarthur to select a preferred provider and seek to negotiate a binding rail haulage contract to support development of the Lake Giles Iron Project.

OTHER RECENT ROUTE TO MARKET PROGRESS

In addition to recent progress on the rail unloading solution and discussions with Southern Ports, Macarthur has recently advanced the following route-to-market successes:

- The Company announced on 25 June 2020, details of applications lodged for haul road and rail loading tenure which maps out a solution to transport magnetite from the Lake Giles Iron Project to the existing rail network that connects to the Port of Esperance. The Company is advancing with the Crown Lease application in support of this process (see full release [here](#)).
- The Company announced on 15 July 2020, it had received a Proposal for development of a Commercial Track Access Agreement from Arc Infrastructure, the owner of the below-rail network (see full release [here](#)).

Cameron McCall, President and Executive Chairman of Macarthur Minerals commented:

“The successful completion of the RCR MT engineering design report for the Helix Dumper is an important development in Macarthur’s progress to completing the route to market for its Lake Giles Iron Project.

We are delivering industry-led solutions that are committed to supporting the principles of open access. That is the right thing to do, but it’s also smart business in a region where we intend to be operating for a long time. Whilst we have our eyes firmly fixed on the delivered cost of our product, we also believe that it’s very important to build positive, mutually beneficial commercial relationships with our key service providers so that they can partner with us and help deliver future growth in our Lake Giles Iron Project for many years to come.

The continued, systematic progress Management is making on securing our route to market is strong, and the Board is pleased that the value the Lake Giles Iron Project can bring to the State of Western Australia is finally being recognised in its recent collaborative engagements with key port and rail service providers.

These positive steps support our belief that the time for the Lake Giles Iron Project has finally arrived. Macarthur has big plans, and more great things are yet to come.”

On behalf of the Board of Directors, Mr Cameron McCall, Executive Chairman

For more information please contact:

Joe Phillips
CEO & Director
+61 7 3221 1796
communications@macarthurminerals.com

Investor Relations – Australia
Advisir
Sarah Lenard, Partner
sarah.lenard@advisir.com.au

Investor Relations - Canada
Investor Cubed
Neil Simon, CEO
+1 647 258 3310
info@investor3.ca



About RCR MT

RCR MT is a subsidiary of ASX listed NRW Holdings (ASX: NWH), a leading provider of diversified services to the mining, energy and civil infrastructure sectors. RCR MT is a market leader in the design and manufacture of an extensive range of surface and bulk materials handling equipment with a reputation for delivering high quality mining technologies nationally and internationally. RCR MT holds an exclusive license to develop the Helix system in Australia and in combination with Kiruna Wagon have the ability to manufacture both the dumper and wagons in Western Australia.

Company profile

Macarthur is an iron ore development, gold and lithium exploration company that is focused on bringing to production its Western Australia iron ore projects. The Lake Giles Iron Project mineral resources include the Ularring hematite resource (approved for development) comprising Indicated resources of 54.5 million tonnes at 47.2% Fe and Inferred resources of 26 million tonnes at 45.4% Fe; and the Lake Giles magnetite resource of 53.9 million tonnes (Measured), 218.7 million tonnes (Indicated) and 997 million tonnes (Inferred). Macarthur has prominent (~721 square kilometer tenement area) gold, lithium and copper exploration interests in Pilbara region of Western Australia. In addition, Macarthur has lithium brine Claims in the emerging Railroad Valley region in Nevada, USA.

This news release is not for distribution to United States services or for dissemination in the United States

Caution Regarding Forward Looking Statements

Certain of the statements made and information contained in this press release may constitute forward-looking information and forward-looking statements (collectively, "forward-looking statements") within the meaning of applicable securities laws. All statements herein, other than statements of historical fact, that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future, including but not limited to statements regarding expected completion of the Feasibility Study; granting of mineral tenure to facilitate infrastructure proposed; the ability to enter into a commercial rail access agreement or the eventual mining of the Project, are forward-looking statements. The forward-looking statements in this press release reflect the current expectations, assumptions or beliefs of the Company based upon information currently available to the Company. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and no assurance can be given that these expectations will prove to be correct as actual results or developments may differ materially from those projected in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include but are not limited to: unforeseen technology changes that results in a reduction in iron or magnetite demand or substitution by other metals or materials; the discovery of new large low cost deposits of iron magnetite; the general level of global economic activity; future changes in rail network capacity and demand; failure to complete the FS; failure to receive mineral tenure for infrastructure; and failure to obtain mining approvals under the Mining Act; inability to negotiate access to tenure at the Port of Esperance. Readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. The forward-looking statements contained in this press release are made as of the date of this press release and except as may otherwise be required pursuant to applicable laws, the Company does not assume any obligation to update or revise these forward-looking statements, whether as a result of new information, future events or otherwise.