

Announcement

Acquisition of Three Underground Mine Optimisation Software Products

17 December 2021

RPMGlobal Holdings Limited (ASX: RUL) [RPM [®]] is pleased to announce it has entered into an agreement to acquire the intellectual property rights to three mine planning optimisation software products as part of a three year collaborative research partnership with Sudbury, Canada based MIRARCO, an innovative solution research provider for the mining industry and research arm of Laurentian University, a leading Canadian mining University.

One of MIRARCO's core research domains resides in furthering the research and development of decision support software for the mining industry. MIRARCO were instrumental in the original research leading to the development of RPM's Underground Schedule Optimisation Tool (*SOT*). SOT, along with Attain and Surface SOT, were products acquired by RPM as part of its July 2020 acquisition of Canadian based Revolution Mining Software.

MIRARCO has developed three separate but complementary underground mine planning optimisation software products, which RPM has under this agreement agreed to acquire and commercialise. These products extend and complement the functionality of RPM's mine optimisation software solutions in the areas of Advanced Valuation, GeoSequencing, and Ventilation.

As part of a strategic multi-year collaboration arrangement, RPM and MIRARCO will continue to work together on research and development projects that deliver demonstrable and innovative solutions for the mining industry.

The Advanced Valuation Module (**AVM**) is a tool developed to facilitate the generation of optimised underground mine plans that are robust to uncertain product prices and ore grades. The mine planner specifies distributions for product prices (over the mine life) and ore grades (for each planned excavation), and AVM optimises the life-of-mine schedule, maximising the Net Present Value (NPV).

The GeoSequencing Module *(GSM)* facilitates the generation of optimised underground mine schedules adhering to stope sequencing constraints that are motivated by geotechnical considerations. The mine planner selects the rules for stope sequencing (as recommended by the geotechnical engineers) and GSM automatically generates alternative sets of stope-to-stope dependencies, or GeoSequencing scenarios, while enforcing the selected rules. The output is a NPV optimised life-of-mine schedule based on the mines geotechnically considerations.

The Ventilation Constraint Module (*VCM*) generates optimised underground mine schedules based on ventilation constraints. Through interacting with a ventilation solver, VCM automatically generates airflow-based constraints on the equipment for each ventilation district. Using these constraints, VCM generates optimised NPV life-of-mine schedules that are feasible from a ventilation perspective.

Commenting on this strategic acquisition and collaboration, RPM CEO and Managing Director Richard Mathews said, "We are very proud that MIRARCO continues to place their trust in RPM to further develop and commercialise these important optimisation programs."

"This acquisition is strategically important for two reasons. Firstly, it further supports our commitment to delivering real innovation to the industry through the ongoing investment and collaboration with the leading minds within key research and development institutes such as MIRARCO. Secondly, it continues our commitment to owning and further investing in the development of innovative strategic mine optimisation solutions particularly for our underground mining clients."

"With the completion of this transaction, RPM is now the proud owner of nine underground mine planning software optimisation products that are used by software suppliers to the mining industry particularly in the underground space to build optimised underground life of mine plans.



Mr Mathews concluded by saying, "RPM is very proud to add Advanced Valuation, Geosequencing and Ventilation to its suite of mine optimisation products. We started acquiring and developing underground mine optimisation products back in August 2017, starting with the acquisition of MineOptima (borne out of research of the Network Optimisation Group at the University of Melbourne) and then in July 2020 with the acquisition of Revolution Mining (borne out of research of MIRARCO, the mining research arm of Laurentian University) and now with MIRARCO once again."

Dr. Nadia Mykytczuk, Interim President and CEO of MIRARCO and Executive Director of the Goodman School of Mines said "RPM's global reach and drive to deliver innovative technology solutions for the mining industry make them a perfect industry partner for MIRARCO. We are looking forward to building on our already strong partnership and collaboration with RPM over the next three years and beyond."

Total consideration for this transaction is expected to be approximately AUD\$165,000. The full consideration will be entirely funded from RPM's existing cash reserves. There are no changes to the RPM Board composition or Key Management Personnel as a result of this acquisition.

The acquisition has been completed with settlement contemporaneous with signature on 17 December 2021.

Authorised by:

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About RPM:

RPMGlobal Holdings Limited (ASX: RUL) [RPM®] was listed on the Australian Securities Exchange on 27 May 2008 and is a global leader in the provision and development of mining software solutions, advisory services and professional development to the mining industry.

With history stretching back to 1968, RPM has been trusted by mining companies of all sizes and commodities to support their growth. Our global expertise has been achieved over the past 50 years through our work in over 125 countries and our approach to the business of mining being strongly grounded in economic principles.

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About MIRARCO:

For over 20 years, MIRARCO has been a leader in the development and deployment of innovative solutions responding to the needs of the mining industry. MIRARCO has built a strong reputation and will continue to move in a positive trajectory as being a conduit for applied research; taking discoveries from the bench to the mine and into communities. Working collaboratively with industry, private sector, government, academia, and community stakeholders has been an essential ingredient in providing effective transfer of knowledge, technology, and sustainable practices.

MIRARCO will continue to build on our internationally recognised expertise across the mining life cycle and help support a resilient network and pipeline of highly qualified personnel. Innovation is a collective effort, and we are here to work together to shape the future of mining in our changing world.

https://mirarco.org/