Sixth Wave Innovations Inc. and Mining and Process Solutions Complete Phase 1 “Green Lixiviant” Testing for Gold Mining with Outstanding Results

written by Raj Shah | September 8, 2021

September 8, 2021 (Source) – Sixth Wave Innovations Inc. (CSE: SIXW) (OTCQB: SIXWF) (FSE: AHUH) (the “**Company**” or “**Sixth Wave**“) is pleased to report results that demonstrate the extraction of gold at high capacity with lower reagent costs. These results were achieved during the successful completion of Phase 1 of the “Green Alternatives for Gold Leaching and Recovery” initiative (the “**Green Initative**“) undertaken with the Centre Technologique des Résidus Industriels (“**CTRI”)** and Australian company Mining and Process Solutions (“**MPS**“). The Company has worked closely with **MPS** and **CTRI** for the past 7 months to test the efficacy of Sixth Wave’s IXOS® molecularly imprinted polymer for gold extraction in conjunction with the MPS *GlyCat*™ process.

IXOS® has previously been proven effective in the extraction of gold from cyanide leach solutions and the completion of Phase 1 of the Green Initiative has demonstrated the ability of IXOS® to extract gold from the pregnant leach solution generated by MPS’ *GlyCat*™ technology. IXOS® has proven superior to traditional activated carbon technology by demonstrating a higher selectivity for gold relative to other gangue materials, resulting in a higher gold capture than activated carbon.

A major Canadian mining company participating in the research project provided the requisite ore samples. Phase 1 tests used IXOS® with the *GlyCat*™ technology to determine Glycat's characteristics and capabilities while confirming IXOS® can adsorb gold from solution with typically an order of magnitude lower cyanide usage.

IXOS® used in combination with the *GlyCat*™ process achieved outstanding gold recovery and the test results demonstrated a much lower reagent cost. Additionally, the use of IXOS® beads for adsorption during the stirred-batch-reactor testing showed excellent adsorption performance in combination with the glycine catalysed leaching process; achieving recoveries that were on par or slightly higher than recoveries using a more traditional cyanide-leach process.

With the successful completion of Phase 1, Phase 2 testing will focus on meeting Canadian ecotoxicity guidelines. Upon successful completion of Phase 2, Phase 3 testing will involve the design of a process circuit that validates the performance of IXOS® and *GlyCat*™ in a full-scale pilot plant at an operating gold mine in Canada. MPS has conducted environmental impact studies for the deployment of the GlyCat™ Process in Australia. The overall project goal is to develop an environmentally friendly flow sheet for the gold mining industry.

"Our collaboration with MPS and CTRI is a major focal point of our mining division activities," said Sherman McGill, Executive Vice President for Sixth Wave. "We are keenly aware of the need for environmental innovation and safeguards. Phase 1 test results indicate that we can successfully leverage our technology with the benefits of MPS" GlyCat™ Process. The CTRI project is an important initiative for Sixth Wave and our IXOS® high performance gold extraction products. It is clear that the mining industry is aggressively seeking new and innovative

approaches to leach and recover gold as a replacement, in whole or in part, for conventional processes. We believe gold mining companies will have significant interest in learning more about our results and how the technology may benefit their operations."

"We are very pleased to be in collaboration with Sixth Wave", states Mr. Ivor Bryan, Managing Director of MPS. "Our respective technological approaches can bring tremendous value to prospective customers by significantly cutting cyanide usage along with the associated costs and environmental impact."

About IXOS® Technology

The foundation of Sixth Wave's products for the resource sector is its IXOS® advanced extraction media developed using Molecularly Imprinted Polymers ("**MIPs**"). MIPs contain specifically engineered cavities designed to target and capture molecules of interest, based on molecular geometry and ionic charge. IXOS® media have the ability to attract target molecules to the exclusion of other undesirable elements.

For gold applications, the IXOS® platform is capable of selectively targeting gold while rejecting contaminants such copper, mercury, and other non-target elements potentially contained in a gold-bearing cyanide leach solution. Non-selectivity is a comparative disadvantage of activated carbon, which tends to recover a variety of undesirable ancillary metals that affect gold process economics and purity.

Test results for extraction of gold from cyanide leach solutions have demonstrated the ability to capture elevated quantities of gold as compared to traditional activated carbon. MIPs nanotechnology can be applied to other target elements in addition to gold, including both inorganic and organic elements that require removal from solution.

About Sixth Wave

Sixth Wave is a nanotechnology company focused on extraction and detection of target substances at the molecular level using its patented technologies in the highly specialized field of molecularly imprinted polymers. Sixth Wave has commercialized IXOS®, a line of extraction polymers for the gold mining industry.

For more information about Sixth Wave, please visit **www.sixthwave.com**

About Mining and Process Solutions (MPS)

MPS holds exclusive global rights to the Glycine Leaching process developed by Curtin University. The company was formed in 2014 as a privately owned and funded company headquartered in Perth, Australia. MPS has 5 international patents granted and pending for Glycine leaching. MPS is developing a number of leaching processes with its *GlyCat*™ process currently available to the market. Two commercial operations in Africa are using the technology to retreat copper/gold tailings that would otherwise be an environmental waste liability. MPS was selected as the 2021 winner of the cleantech category in the global Extreme Technology Challenge – the competition consisted of 3700 startups and is the world's largest startup competition. MPS was also the overall winner of the 2019 Western Australia Innovator of the Year Award and winner of the 2017 Australian Technologies Competition – Mining Sector.

For more information about MPS, please visit **www.mpsinnovation.com.au**

ON BEHALF OF THE BOARD OF DIRECTORS
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This press release includes certain statements that may be deemed "forward-looking statements" including statements regarding IXOS® system scale-up, performance and commencement of full-scale production. All statements in this release, other than statements of historical facts, that address future events or developments that the Company expects, are forward looking statements. 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 actual events or developments may differ materially from those in forward-looking statements. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, including the risks that IXOS® system performance may not be maintained at production level, that anticipated cost savings and performance levels relative to competing technologies may not be realized, that other technologies with better performance or costs may be developed by competitors, and other risks detailed in the Company's filing statement available at www.sedar.com, which may cause the Company's actual performance and financial results in future periods to differ materially from any projections of future performance or results expressed or implied by such forward-looking statements.