



EnviroMetal Proves Extended Formula Reusability and Achieves Higher Gold Recoveries Than Cyanide

Vancouver, BC, December 1, 2021, EnviroMetal Technologies Inc. (“EnviroMetal” or the “Company”), (CSE: ETI) (OTCQX: EVLLF) (7N2: FSE) is pleased to reiterate the following results of an extensive formula reusability test and a series of comparative tests on the EnviroMetal formula and process versus sodium cyanide (“Cyanide” or “NaCN”). The research work was performed by EnviroMetal at their research lab located in Burnaby and by SGS at their Burnaby multi-lab.

The tests were performed as part of continued collaboration between the Company and several development and production stage gold miners. The comparative tests were designed to compare the leach efficiency and gold recoveries of EnviroMetal’s proprietary eco-friendly lixiviant to that of Cyanide. Tests using EnviroMetal’s lixiviant were conducted at the Company’s Burnaby lab and tests using Cyanide solution were conducted by SGS in their lab.

Tests were performed using two separate samples of high-grade mineralized material from a Canadian gold mine: high grade ore with an assay grade of 675 grams per tonne (“g/t”) gold; and flotation concentrates with an assay grade of 55.1 g/t gold. For both materials 24 hour leach tests were performed using both medium and high concentrations EnviroMetal’s lixiviant and 1 gram per litre (“g/L”) and 5 g/L Cyanide concentrations.

High-Grade Mineralized Cyanide Comparison

In tests conducted on the high-grade ore sample, the EnviroMetal lixiviant, in both medium and high concentrations, significantly outperformed Cyanide over the 24-hour test. The tests on the high-grade ore sample showed the most favorable results with the EnviroMetal formula attaining gold recoveries of over 99% in under 6 hours compared to Cyanide which attained recoveries of 94% in 24 hours. The results are presented in Table 1 below:

Table 1: Comparative Test on High-Grade Mineralized Gold Sample

Leach Type	Recovery (%)				
	1hr	3hr	6hr	8hr	24hr
EnviroMetal Med	82.6	79.9	99.6	-	-
EnviroMetal High	88.0	94.6	99.5	-	-
NaCN 1 g/L	8.7	18.2	-	67.1	93.9
NaCN 5 g/L	14.1	25.8	-	74.2	93.7

Mid-Grade Flotation Concentrate Cyanide Comparison

The tests on flotation concentrate resulted in high gold recoveries of over 92.5% using EnviroMetal’s lixiviant in 6 hours. Similar recoveries were achieved using Cyanide in 30 hours. The results are presented in Table 2:

Table 2: Comparative Test on Mid-Grade Flotation Concentrate

Leach Type	Recovery (%)					
	1hr	3hr	6hr	8hr	24hr	30hr
EnviroMetal Med	57.0	77.0	92.5	-	-	-
EnviroMetal High	82.5	88.2	93.0	-	-	-
NaCN 1 g/L	0.8	58.0	-	82.1	92.9	93.5
NaCN 5 g/L	28.2	63.2	-	86.3	94.5	94.6

Ish Grewal, M.A.Sc., P.Eng. and Executive Vice President of EnviroMetal, states, *“I am pleased with the efforts of our team to advance the performance and chemistry of the EnviroMetal process to be able to generate results that exceed those of Cyanide by such a large margin.”*

EnviroMetal Solution Reusability Test

As part of an analysis of the sustainability and economics of EnviroMetal’s lixiviant and process, a series of ten locked cycle tests were performed to evaluate the continued reusability of the lixiviant. Each of the ten separate tests was conducted using the same original lixiviant and a unique ore sample. Each cycle test included full-cycle leaching of the unique ore sample to produce a gold-rich pregnant solution (“PLS”), electrowinning of the gold from the PLS, and double washing the leach residue (tailings) with water to recover residual key reagents. The results are presented in Table 3.

Table 3: Locked Cycle Leach on High-Grade Mineralized Gold Samples

Test Number	Calculated Head Grade (g/t Au)	Residue Grade (g/t Au)	Total Au Rec (%)	Pulp Dens %	Gold Recovery %			
					1hr	2hr	3hr	4hr
CSN301	967.2	9.4	98.6	20.0	86.8	91.1	94.4	99.1
CSN302	808.9	40.7	94.0	19.7	80.8	95.1	87.8	95.4
CSN303	632.8	13.6	98.0	20.0	-	89.3	-	98.0
CSN304	715.8	9.1	98.6	20.0	73.5	77.0	81.2	98.8
CSN305	807.9	61.5	90.9	20.2	98.3	92.8	-	92.7
CSN306	1111.6	64.4	90.5	19.3	66.7	56.1	66.6	94.6
CSN307	725.9	41.4	93.9	19.6	81.2	97.7	-	94.7
CSN308	823.0	43.7	93.5	19.4	72.3	82.8	80.0	95.1
CSN309	684.4	90.5	86.6	19.1	80.4	65.7	90.1	87.7
CSN310	723.5	30.5	95.5	19.1	72.5	-	97.9	96.0
Average	800.1	40.5	94.0	19.6	86.5	85.2	94.2	95.2

Over the ten cycles of the test, gold recoveries ranged from 88% to 99% with an average recovery of 95.2%. Despite the variations in the ore samples there was no evident trend of decreasing gold recovery with increasing cycles. Recycling and reusing the lixiviant repeatedly did not appear to reduce gold recovery over the ten cycles.

Duane Nelson, CEO of EnviroMetal States; *“These are probably our most important test results to date. They confirm equivalent or better recoveries than cyanide, faster leach kinetics than cyanide, and prove the sustainable, and reusable nature of our formula. This continued reusability is the foundation of our powerful and eco-friendly lixiviant. The EnviroMetal formula provides a very effective and sustainable alternative to Cyanide and smelting for the recovery of gold with an almost zero environmental footprint.”*

About SGS

SGS is the world’s leading inspection, verification, testing and certification company. SGS is recognized as the global benchmark for quality and integrity. With more than 89,000 employees, SGS operates a network of over 2,600 offices and laboratories around the world. We are constantly looking beyond customers’ and society’s expectations in order to deliver market leading services wherever they are needed. Working together to make the world a better, safer place.

About EnviroMetal Technologies Inc.

EnviroMetal Technologies is engaged in the development and commercialization of environmentally-friendly formulas and technologies for the treatment of materials in the primary and secondary metals industries. Using its proprietary non-cyanide, water-based, neutral pH treatment process EnviroMetal extracts precious metals from ores, concentrates, and electronic waste (“E-Waste”).

Backed by the momentum of a first-class staff of scientists and engineers, tens of thousands of individual tests and assays, independent validations, and tens of thousands of hours in research and development, EnviroMetal’s technology is emerging as a potential new eco-friendly standard for the hydrometallurgical extraction of precious metals in both the mining and E-Waste industries. For more information please visit: <https://EnviroMetal.com>

Forward-Looking Statements

This News Release contains “forward-looking information” and “forward-looking statements” within the meaning of applicable Canadian and the United States securities legislation. Statements contained herein that are not based on historical or current fact, including without limitation statements containing the words “anticipates,” “believes,” “may,” “continues,” “estimates,” “expects,” and “will” and words of similar import, constitute “forward-looking statements” within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking information may include, but is not limited to, information concerning our Research and Development activities, the accuracy of our capital and operating cost estimates; production and processing estimates; the results, the adequacy of EnviroMetal’s financial resources, and timing of development of ongoing research and development projects, costs and timing of future revenues or profits and adequacy of financial resources. Wherever possible, words such as “plans”, “expects”, “projects”, “assumes”, “budget”, “strategy”, “scheduled”, “estimates”, “forecasts”, “anticipates”, “believes”, “intends”, “targets” and similar expressions or statements that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved, or the negative forms of any of these terms and similar expressions, have been used to identify forward-looking statements and information. Statements concerning future revenue or earnings estimates may also be deemed to constitute forward-looking information. Any statements that express or involve discussions concerning predictions, expectations, beliefs, plans, projections, objectives, assumptions, or future events or performance are not statements of historical fact and may be forward-looking information. Forward-looking information is subject to a variety of known and unknown risks, uncertainties, and other factors that could cause actual events or results to differ from those expressed or implied by the forward-looking information. Forward-looking information is based on the expectations and opinions of EnviroMetal’s management on the date the statements are made. The assumptions used in the preparation of such statements, although considered reasonable at the time of preparation, may prove to be imprecise. We do not assume any obligation to update forward-looking information, whether as a result of new information, future events, or otherwise, other than as required by applicable law. For the reasons set forth above, prospective investors should not place undue reliance on forward-looking information. The CSE has not approved or disapproved of the information contained herein.

Contact Information :

Jason Leikam
VP Corporate Development
EnviroMetal Technologies Inc.
info@EnviroMetal.com
(604) 428-2400 x. 104