

BacTech Confirms Gold and Copper Concentrate Potential in Peru for Bioleaching

Trujillo-Area Field Study Determines Abundance of High-Arsenic Enargite and Chalcopyrite Readily Available from Local Producers

TORONTO, ON. February 1, 2022 – <u>BacTech Environmental Corporation</u> (CSE: BAC, OTC: BCCEF, FSE: 0BT1) ("BacTech or the Company"), a commercially proven environmental technology company delivering effective and eco-friendly bioleaching and remediation solutions, today announced its bioleaching project interests in Peru will advance, focusing on gold and copper concentrates and potential metal recovery efforts.

Having developed relationships with a number of artisanal miners and processors throughout the Trujillo area, BacTech has made arrangements to collect seven 15kg concentrate samples during the next two-to-three months from selected producers and processors. Global mining executive and technical advisor Oscar A. Alvarado Sr. will continue on as project lead. When ready, the samples will be shipped to ALS Laboratories facilities in Perth, Australia and subjected to bioleach testing under the guidance of Dr. Paul Miller. BacTech has no ownership in any of the mines where concentrates are being sourced.

Similar to the model in place for the Company's commercial interests in Ecuador, BacTech has been meeting with producers who are looking to maximize returns for their concentrates, knowing that a safe and profitable processing solution to treat high arsenic concentrates in the Trujillo area is being considered. BacTech believes a bio-oxidation plant would support local economic development with the benefit of knowing that the processing of toxic materials would be dealt with in a sustainable manner.

Miners across South America have been affected by an October 1, 2021 Chinese government-directed import tax of 13% placed on arsenic gold concentrates coming into the country for processing. This action has resulted in price slashing scenarios in which the miners are paid approximately 50% of the gold value delivered. Penalties escalate further with contained arsenic levels above the 10% level.

In one illustrative meeting, BacTech was shown material from three different areas of a single mine – each selectively mined in an effort to produce lower arsenic values for Chinese buyers. All sample materials contained copper, gold and silver as recoverable metals, yet prices being paid all fell considerably short of BacTech's Fair Market Value estimates:

- Sample 1 FMV / \$750 per ton; Price Realized / \$270 per ton
- Sample 2 FMV / \$650 per ton; Price Realized / \$200 per ton
- Sample 3 FMV / \$500 per ton; Price Realized / \$80 per ton

"As we've seen in Ecuador, Peruvian producers are forced to mine selectively and avoid areas with high arsenic levels. The one big difference between projects is that Peru also includes copper in addition to gold, which has me excited," said Ross Orr, CEO of BacTech Environmental. "Because our novel bioleaching solutions use biology to safely process a wide array of mined metals, we're able to seek out and capitalize on these opportunities that others find prohibitive. We believe Trujillo has the type of high-pay potential that our shareholders will find attractive, but we also see ourselves partnering with the community and being in a position to help lift the local economy while maintaining exceptional margins."

Important to note, BacTech has previous experience working with chalcopyrite having collaborated with Industrias Penoles, S.A.B. (Q: IPOAF) on a bioleaching R&D project at its research park in Monterrey, Mexico a number of years ago. At the time, Penoles committed US\$5M to build a demonstration plant to investigate the use of bioleaching on dirty chalcopyrite copper concentrates. Copper recovery using bioleaching / solvent extraction / electrowinning technology was used to produce 99.99% pure copper plate.

"It's important to get a jumpstart on assessing the commercial viability of this project, even as we edge closer to permitting and a construction start in Ecuador. We've learned a lot over the years, and this knowledge will be put to good use and make all forthcoming projects as turnkey as possible. The plan is for BacTech to be active in multiple countries," Orr continued. "We build our own plants and utilize our own eco-conscious proprietary technology for a reason — it places us firmly in control of our own triple bottom line focusing on people, planet and profit."

About the Ponce Enriquez Bioleaching Project

BacTech is planning to build a new owner-operated bioleaching facility near Ponce Enriquez, Ecuador, in a region where arsenic is associated with gold ore (Arsenopyrite). The Company's plan is to build a 50 tpd bioleach plant capable of treating high gold/arsenic material. A 50 tpd plant, processing 1.75 ounces of gold per tonne of feed, similar to feeds available to the Company from local miners, would produce approximately 26,000 ounces per year. Plant designs are modular and can be expanded without affecting ongoing production. The total concentrate market in the Ponce Enriquez area is estimated to be between 200 and 250 tonnes per day, allowing for increased throughput potential with a larger plant.

In total, there are over 90 small mines operating in the area. BacTech intends to return local miner compensation back to previous payment levels, prior to a sweeping price reduction imposed by Chinese buyers due to recent import levies on arsenic/gold concentrates entering China. BacTech continues to investigate the prospects of establishing additional modern bioleaching facilities across other areas of Ecuador, Peru, and Colombia. Where possible, the Company will partner with national and local governments, non-governmental organizations (NGOs), and others to assist with the funding of these projects.

About BacTech Environmental Corporation

BacTech is a proven environmental technology company, delivering effective and eco-friendly biomining and remediation solutions to commercial operations to process and recover preferred metals (gold, silver, cobalt, and copper) smartly and safely remove and transform harmful contaminants like arsenic into benign EPA-approved products for landfill. Tapping into numerous environmental and economic advantages of its proprietary method of bioleaching, BacTech uses naturally occurring bacteria, harmless to both humans and the environment, to neutralize toxic mining sites with high-pay potential. BacTech is publicly traded on the CSE under the symbol "BAC"; on the OTC as "BCCEF"; and the Frankfurt Stock Exchange as "OBT1".

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This news release contains "forward-looking information", which may include, but is not limited to, statements with respect to future tailings sites, sampling or other investigations of tailing sites, the Company's ability to make use of infrastructure around tailings sites or operating performance of the Company and its projects. Often, but not always, forward-looking statements can be identified using words such as "plans", "expects", "is expected", "budget", "scheduled",

"estimates", "forecasts", "intends", "anticipates", or believes" or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance, or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Forward-looking statements contained herein are made as of the date of this news release and the Company disclaims, other than as required by law, any obligation to update any forward-looking statements whether because of new information, results, future events, circumstances, or if management's estimates or opinions should change, or otherwise. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, the reader is cautioned not to place undue reliance on forward-looking statements.

Shares outstanding: 157,455,558

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