

# BacTech Environmental Set to Sample Arsenopyrite Concentrate From 2 Ecuador Mines

May 29, 2019, Toronto, Canada

BacTech Environmental Corporation ("BacTech" or the "Company") (CSE:BAC, US-OTC:BCCEF) today announced that it has taken initial steps to establish a bioleach project in Ecuador that will treat high arsenic concentrates produced in the country.

A visit that coincided with the annual Expominas Convention in Quito in late April provided an opportunity for management of BacTech to identify and secure arsenopyrite concentrate samples for bioleach work to be conducted at Laurentian University under the direction of the Company's Dr. Paul Miller. It is anticipated that samples totalling approximately 35 kg of arsenopyrite concentrate will be secured from 2 mines in an area that historically has produced very high levels of arsenic associated with gold. The sample collection should take place in early June and will be carried out by MSA Labs of Vancouver, Canada. MSA will also be tasked with providing assays for the samples as well as a 35 element ICP scan for metallurgical data. A standard bioleach test program will take 6 months to complete.

In Ecuador, high arsenic concentrates are sold mostly to buyers in Asia with severe penalties applied to the sales price. It is not uncommon for concentrates with up to 15% arsenic to be sold for as little as 50% of the gold content with no compensation for any related silver or copper. Bioleaching provides a hydrometallurgical solution to processing these "dirty" concentrates, as any associated arsenic is produced as a ferric arsenate, meeting United States Environmental Protection Agency ("EPA") or local equivalent environmental regulations for management.

Producers of high arsenic concentrates are constantly searching for an inexpensive means of processing their material, but this has proven to be very difficult given the global restrictions on treating concentrates high in arsenic. Smelter and/or roasters have severe limitations on the amount of arsenic that can be burned as the off-gas is a very toxic arsenic trioxide which is collected and stored. The Giant Mine in Yellowknife, Canada is a good example of the long-term effects of burning arsenopyrite as there remains some 250,000 tonnes of this material stored underground waiting for a disposal solution. In this instance the estimated cost to rectify the mine site and the associated arsenic is estimated to cost the taxpayers of Canada \$1 billion.

Over the past year, BacTech and Laurentian University have run 2, separate bioleach test programs on 3 different types of material from Ecuador, namely ore, concentrate and tailings. Results of the first program confirmed the ability of bioleaching to produce and stabilize over 99% of the contained arsenic in the material. Arsenic values in several of the samples reached as high as 17%. The second test program was designed to focus on different pulp densities which in turn will provide expected gold percentage recovery. These final results will be released shortly pending assay by an independent laboratory. The upcoming bioleach work will focus on concentrate from 2 separate mines from the same area. Should the test work results conform to historic results on similar materials treated by BacTech, the Company will move to negotiate a secure feed by paying a higher price per tonne of concentrate than what is received today. The material will be the base feed for what is initially expected to be a 40 tonne per day bioleach plant in the area.

A local bioleach circuit would provide many benefits to Ecuador and the affected area of the plant. Instead of exporting raw material for processing, the plant will allow for local job creation, increased taxes generated locally and federally and of course, the knowledge that arsenic associated with gold production in the area is being dealt with in a sustainable manner.

There are many arsenic gold mines in the area, and it is expected that over time the amount of arsenopyrite concentrate that is produced locally will continue to grow allowing for modular expansion of the original bioleach plant to handle the increase in feeds.

"We are very excited about starting this new venture. The support we have received from the Ministry of the Environment has been great as it helps to open doors for us in the country. These two particular mines are part of a much larger community of mines in the area. It is not unreasonable to expect that if we build the plant, that others will come forward to supply concentrates for local processing. The key is getting the commitment to a secure feed so we can finance the project," commented Ross Orr, President and CEO of BacTech.

#### **Company Overview**

The Telamayu project involves the environmental remediation of the "Antiguo" tailings with an option on the larger "Nuevo" tailings, both situated at the Telamayu Mill site near the town of Atocha in the Department of Potosi, Bolivia.

A second project entails BacTech investigating the use of bioleach processing to treat historic arsenic tailings and arsenopyrite concentrates produced in the Ponce Enriquez area of Southern Ecuador.

Finally, BacTech has recently agreed to participate with a group looking to reprocess the Arsenic Stockpile in Snow Lake, Manitoba.

For further information contact: Ross Orr, President & CEO, BacTech Environmental Corporation/416-813-0303 ext. 222, Cell 416-346-5529 and

Email: borr@bactechgreen.com

Robin Cook, Investor Relations: 416-809-1738, Email: robin@frontiermcg.com

#### Follow us on:

Facebook <a href="http://www.facebook.com/BacTechGreen">http://www.facebook.com/BacTechGreen</a>

Twitter:http://twitter.com/BacTechGreen

LinkedIn http://www.linkedin.com/company/1613873

Vimeo http://vimeo.com/bactechgreen

YouTube <a href="http://www.youtube.com/user/bactechgreen">http://www.youtube.com/user/bactechgreen</a>

### Special Note Regarding Forward-Looking Statements

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: 96,903,756

The Canadian Securities Exchange (CSE) has not reviewed and does not accept responsibility for the adequacy or the accuracy of the contents of this release.