BacTech Reports Gold Concentrate Grades From 5 Flotation Plants in Ecuador

TORONTO, Aug. 1, 2017 /CNW/ - BacTech Environmental Corporation ("BacTech" or the "Company"), (CSE: BAC, OTC Pink: BCCEF) today released assay values for arsenopyrite concentrates collected from various flotation plants in the Ponce Enriquez mining district, Ecuador. Third-party fire assays were conducted on the concentrates by SGS Canada Inc. at Lakefield, Ontario. Of note, Sample EC-26 returned 67.3 g/t gold (2.17 oz/t) with 12.3% arsenic. This is a classic example of a high gold/arsenic concentrate from the district, which has a limited end-user market. The assays also showed substantial amounts of iron and sulphide-sulphur, which are essential for successful bioleaching.

Sample No.	Gold (g/t)	Silver (g/t)	Arsenic (%)
EC-41B	24.4	19.0	7.43
EC-26	67.3	41.0	12.3
EC71	18.3	55.0	1.31
EC72	17.5	37.0	7.48
EC41R	33.9	27.0	0.65

The concentrates were collected from 5 strategically-selected flotation plants to provide relevant material for the Company's bioleach test work being conducted at Laurentian University in Sudbury, Canada. In addition to the concentrates, mineralized material and tailings samples were also collected and will be tested as the opportunity exists to retreat high grade tailings or fresh ore by constructing a concentration plant ahead of bioleaching once an entry level bioleaching facility has been established. The Laurentian test work program was recently awarded a \$75,000 grant from the Ontario Center of Excellence ("OCE") to be matched by BacTech, 50% in cash and 50% in kind. The test work is expected to last 6-7 months and BacTech will provide interim releases of results during that period.

The bioleaching test work will examine the use of bioleaching by treating a blend of suitable concentrate feedstocks as exampled in the above assay table. Bioleaching has an excellent commercial track record for the treatment of arsenical refractory gold concentrates. The majority of the bioleach plants that have been built to date (there are over 20 bioleach plants that have been, or are, operating globally) target arsenopyrite as a feed. This is because bioleaching produces a stable form of arsenic (ferric arsenate) that is US EPA approved for disposal. BacTech has designed and built 3 bioleach plants for third parties to date.

Bioleaching lends itself well to operations in remote regions producing benign tailings and is used as an on-site treatment alternative to shipping of concentrates off-site to third party smelters. The current Ecuadorian mining operations create high grade gold concentrates that are sold for much less value due to the arsenic levels. BacTech has identified the opportunity to provide a downstream solution applying bioleaching and its ability to produce a stable form of arsenic (ferric arsenate) as final tailings. BacTech will be studying the possibility of treating concentrates, currently sold to foreign buyers, to establish whether bioleaching can provide logistical savings and a cleaner processing approach for arsenopyrite concentrates. Complimenting this type of concentrate are lower grade gold concentrates with lower arsenic contents.

The results of the bioleach study will be integral in the design of a bioleach circuit for Ponce Enriquez operations. The process design envelope will allow for the treatment of concentrates coming from many different sources. BacTech's bioleach plant that was built for a third party in China processed successfully, concentrates from over 12 different sources.

Dr. Paul Miller, who is responsible for technical management of bioleaching at BacTech, has just returned from a visit to Ponce Enriquez where he initiated negotiations with various plants that provided the concentrates. Dr. Miller also started conversations with the Ministry of Mining and the Geological Service of Ecuador (INIGEMM), to find areas of synergy regarding small-mining policy. Both institutions were very interested in deploying the technology in Ecuador.

Dr. Paul Miller holds a Doctorate in a Chemical Engineering from Birmingham University in England and is a Chartered Engineer and a Member of The Institute of Mining and Metallurgy of London. He is a Qualified Person under National Instrument 43-101, has visited Ponce Enriquez and has read and approved this press release.

Company Profile

BacTech Environmental Corporation holds the perpetual, exclusive, royalty-free rights to use the BACOX bioleaching technology for the reclamation of tailings and mining waste materials. The Company's principal focus is a high-grade tin/silver/copper tailings project called Telamayu, located in Atocha, Bolivia in association with COMIBOL, the Bolivian state mining group. In Ecuador, BacTech is studying the use of bioleaching to treat high grade gold/arsenic concentrates in country thereby reducing the environmental footprint associated with small scale mining.

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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 by the use of 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 as a result 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 61,262,930

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.

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