



## BacTech and Duran Sign MOU to Investigate Bioleach Opportunities in Northern Peru

Toronto, Canada, November 17, 2015 - BacTech Environmental Corporation ("BacTech" or the "Company"), (CSE: BAC, OTC Pink: BCCEF, WKN: A1H4TY) today announced that it has signed a non-binding Memorandum of Understanding ("MOU") with Duran Ventures Inc. ("Duran", TSX-V: DRV)

The basis of the MOU is to determine the financial viability of constructing a bioleach circuit to be built as an add-on to Duran's Aguila Norte mineral processing plant ("Aguila Norte Plant") near Trujillo, Peru (see Duran NR dated October 19, 2015). Construction of the Aguila Norte Plant, currently underway, is expected to be completed late in the 1<sup>st</sup> quarter 2016.

If deemed viable, the bioleach plant will be designed to address the high levels of arsenic that are present in high-grade precious metal material, which are prevalent in northern Peru. Duran's geologists have already identified several prospective sources of this mineralized material, which is presently not treatable at most other toll-milling facilities in Peru. Both companies agree that a bioleach circuit at the Aguila Norte Plant will be an environmentally friendly alternative to process refractory and arsenic rich precious and base mineralized material mined by artisanal miners. In many cases, gold rich refractory material is treated with mercury in an attempt to extract gold from the host rocks. Recoveries of gold are very low and much of the material is discarded after mercury treatment leading to widespread contamination of soils and waterways.

If further investigation shows favorable economics on identifiable mineralized material, a Joint Venture will be formed with Duran's 80% owned subsidiary Minera Aguila de Oro SAC ("MADOSAC") and BacTech with each party holding 50% ownership of the bioleach circuit. The ownership in the Aguila Norte Plant currently being constructed will not be subject to the Joint Venture. BacTech will finance the cost of the construction of the bioleach circuit. Duran will have the right to participate in BacTech's financing if a construction decision is considered.

Flotation will be the preferred method of treating the difficult refractory and arsenic-rich gold/base metal material delivered to Duran's Aguila Norte Plant. This flotation concentrate will then be processed through the bioleach circuit which should deliver liberated gold for conventional recovery, possible by-product copper or silver and ferric arsenate for disposal. It should be noted that without eliminating the arsenic, any sale of this concentrate to a smelter would be very difficult given the restrictions imposed on smelters and their ability to burn arsenic. One of the major attributes of bioleaching is its ability to process high arsenic concentrates whereby the arsenic is converted to ferric arsenate, which is an acceptable final state product according to US EPA regulations.

The approximate ratio for concentration is roughly 20%. This means that for each 100 tonnes of mineralized material delivered to the flotation plant there would be 20 tonnes of concentrate produced and available for treatment through the bioleach circuit. Duran's

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Aguila Norte Plant will charge a processing fee to the Joint Venture. Any profits generated by processing mineral through the bioleach circuit will be equally shared after first paying the Aguila Norte Plant its processing fee.

For the past several month's Duran's geologists have collected gold mineralized samples from different sites in northern Peru. The assay and metallurgical results from these samples convinced both parties that further investigation was warranted. It should be noted that some of the samples were representative of non-refractory sulphide mineralization and contained potential "preg-robbing" copper as well as gold. Another benefit of bioleaching is the ability to put this copper into solution for recovery as a by-product. This then allows for conventional recovery of the gold without the use of large amounts of cyanide that would be otherwise consumed by copper content.

Duran recently announced the construction schedule of its 80% owned Aguila Norte 100-ton per day flotation plant in Northern Peru. This permitted plant will process simple sulphide mineralized material and if a bioleach circuit is added to the plant, the companies believe that more favorable mineral purchase agreements could be secured.

Duran's intention is to expand to the maximum 350 tonnes per day allowed under the Peruvian small miners' regulations. The Aguila Norte site is considered extremely favorable for a bioleach circuit because of its low elevation (200 meters above sea level elevation) and nearby workforce, water and power.

"We see a real need for a plant such as the one proposed at Duran's Aguila Norte Plant near Trujillo in Northern Peru. Through Dr. Marcello Veiga at the University of British Columbia School of Mining we learned about the issues in Peru, Ecuador and Colombia concerning the use of mercury in artisanal mining. Unfortunately creating a concentrate with high arsenic restricts the options for processing leading to very little value being created for the artisanal miner. With bioleaching we hope to be able to eliminate mercury use, stabilize the arsenic and provide a better livelihood for the artisanal miners both financially as well as from a health perspective," said Ross Orr, President and CEO of BacTech.

"We feel that this investigation and the continued study of a variety of mineralized material throughout Peru will be very beneficial for miners. The location of the Aguila Norte Plant is ideal and will be able to process ore of many types for several decades due to favorable infrastructure and topography. Duran is continually reviewing and acquiring concessions and some have high-grade arsenic-rich mineralization ideal for bioleach processing. We look forward to working with the BacTech team and look forward to a positive outcome," said Jeffrey Reeder, President and CEO of Duran.

Finally, in Bolivia, BacTech is very close to closing the transaction with Comibol for the remediation of the Telamayu tailings complex. It is hoped that it will be finalized prior to year-end.

## **Company Profile**

BacTech Environmental Corporation holds the perpetual, exclusive, royalty-free rights to use the patented BACOX bioleaching technology for the reclamation of tailings and mining waste materials. The Company's principle focus is a high-grade silver/copper tailings project called Telamayu, located in Atocha, Bolivia, in association with

COMIBOL, the state mining group. The Company continues to field enquiries globally with respect to additional opportunities for remediation, including licensing transactions for the technology.

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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 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 42,393,994**

*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.*

