CNSX: BAC



PRESS RELEASE

BacTech Files Provisional Patent Application

Toronto, Canada, June 6, 2012 - BacTech Environmental Corporation ("BacTech" or the "Company", CNSX: BAC, WKN: A1H4TY) today announced that it has filed a provisional patent application for a new invention relating to bioleaching. The patent application covers the use of bioleaching as a means of manufacturing liquid ferric sulphate

Ferric sulfate is a staple chemical with a wide range of applications. In conventional water treatment processes, it is commonly used as a coagulant to remove turbidity, colour, phosphate, and heavy metals. In the mining industry, ferric sulfate is not only a leaching lixiviant in various processes treating copper concentrates and uranium ores, but also a reagent commonly used to control arsenic in metal mining effluents.

The discovery of the invention arises from BacTech's bioleach work at Snow Lake, Manitoba. The invention provides for the onsite production of ferric sulphate at the mine using pyrite as a source and thereby eliminating the costly transportation of the product. With the formula FeS₂, pyrite is the most common sulfide mineral and is widely associated with other metal sulfide deposits. Unless it contains valuable metals to be recovered, pyrite is usually rejected into tailings through the flotation processes. Such tailings represent a large disposal problem because pyrite gets oxidized and generates sulfuric acid after being exposed to air and water. With this new invention, mine tailings at existing operations can be refloated to provide a cheap source of material for the creation of ferric sulphate. Pyrite oxidation in tailings is by far the greatest contributor of acid mine drainage.

"We have always looked at projects with the idea of extracting metal as our compensation. Here we actually don't need associated metals as we are making a new product with wide-ranging commercial application by separating the iron from the pyrite through bioleaching. The simplicity is really what makes this interesting from a business point of view. In essence, we have most of the R&D out of the way, so moving to a commercial state will be relatively quick and inexpensive," commented Ross Orr, President and CEO of BacTech.

"We have designed a single bioleach tank plant that can be delivered and built onsite that will eliminate the costly alternative of trucking in the ferric sulphate. The payback should be relatively short for the end user. We have also discovered that ferric sulphate is used extensively in municipal wastewater treatment plants. For example, the City of Toronto uses a precipitate to knock phosphorous out of the water stream to avoid discharge into Lake Ontario. Phosphorous is responsible for the enhanced growth of algae bloom," Mr. Orr said.

The provisional patent is an alternate application of REBgold Corporation's bioleaching technology. BacTech owns a perpetual, exclusive license to the bioleach technology for tailings' reclamation and is allowed under the agreement with REBgold to own any improvements made to the technology. This patent is the invention of various contractors to the Company and they have accepted to assign their rights in the invention to the Company subject to the terms of a royalty agreement.

Special Note Regarding Forward-Looking Statements: Certain statements included or incorporated by reference in this news release, including information as to the future financial or operating performance of the Company, its subsidiaries and its projects, constitute forwardlooking statements. The words "believe," "expect," "anticipate," "contemplate," "target," "plan," "intends," "continue," "budget," "estimate," "may," "schedule" and similar expressions identify forward-looking statements. Forward-looking statements include, among other things, statements regarding targets, estimates and assumptions in respect of gold production and prices, operating costs, results and capital expenditures, mineral reserves and mineral resources and anticipated grades and recovery rates. Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by the Company, are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forwardlooking statements made by, or on behalf of, the Company. Investors are cautioned that forward-looking statements are not guarantees of future performance and, accordingly, investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein. Forward-looking statements are made as of the date of this press release and the Company disclaims any intent or obligation to update publicly such forwardlooking statements, whether as a result of new information, future events or results or otherwise.

BacTech 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. In November 2011, BacTech signed a contract with the Mines Branch of the Manitoba Department of Innovation, Energy and Mines, to remediate an arsenopyrite gold stockpile situated at the Snow Lake Mine in Snow Lake, Manitoba. The Company continues to field enquiries globally with respect to additional opportunities for remediation.

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Shares outstanding 39,088,361

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

BacTech Environmental Corporation