

FORM 51-102F3

**MATERIAL CHANGE REPORT  
UNDER NATIONAL INSTRUMENT 51-102**

1. **Name and Address of Company**

BacTech Environmental Corporation  
50 Richmond Street East, Suite 300  
Toronto, Ontario M5C 1N7

2. **Date of Material Change**

April 27, 2011

3. **News Release**

A news release with respect to the material change referred to in this report was issued on April 27, 2011 and subsequently filed on SEDAR.

4. **Summary of Material Change**

BacTech Environmental Corporation (“BacTech” or the “Company”) announced that it had been awarded the contract by the Mines Branch of the Manitoba Department of Innovation, Energy and Mines, to remediate a stockpile of arsenopyrite concentrate located in the community of Snow Lake. The contract is subject to negotiating a suitable agreement between BacTech and the Manitoba government. BacTech had responded to a Request for Proposal issued by the Mines Branch on December 21, 2010.

5. **Full Description of Material Change**

BacTech Environmental Corporation (“BacTech” or the “Company”) announced that it had been awarded the contract by the Mines Branch of the Manitoba Department of Innovation, Energy and Mines, to remediate a stockpile of arsenopyrite concentrate located in the community of Snow Lake. The contract is subject to negotiating a suitable agreement between BacTech and the Manitoba government. BacTech has proposed a “no cost to the taxpayer” approach to the clean up. The Company will recover payable metals for its own account from the stockpile while treating the contained arsenic. The Company’s bio-oxidation technology has been used successfully in the gold industry for many years to aid the extraction of gold from arsenical concentrates, while stabilizing arsenic values into a benign form.

BacTech responded to a Request for Proposal issued by the Mines Branch on December 21, 2010. BacTech’s interest in the project stems from test work completed in 2010 whereby bioleaching technology was determined to be well suited for the stabilization of the high levels of arsenic in the stockpile.

**History:** The Snow Lake stockpile was created in the 1950s as a by-product of gold production from the Nor Acme Mine. Due to the refractory nature of the ore and its high arsenic levels, it was decided at that time to produce an arsenopyrite concentrate which

was subjected to cyanidation to recover exposed gold values, leaving behind a residue which contained significant gold values that would be processed at a later date. Based on historic data provided by the Manitoba Mines Branch in the Request for Proposal, the stockpile is estimated at approximately 250,000 tonnes with an average grade of approximately 9 grams per tonne of gold. The stockpile is 6 m to 10 m high and encompasses an approximate area of 19,500 m<sup>2</sup>. BacTech cautions the reader that the potential quantity and grade provided above is conceptual in nature. Insufficient test work has been carried out on the stockpile to define a mineral resource. It is uncertain if the test work to be conducted by BacTech will result in the stockpile being delineated as a mineral resource.

**Work Program:** BacTech has engaged the services of Dr. Barbara Sherriff, a recently retired professor from the University of Manitoba who has a fifteen-year history evaluating the stockpile. Dr. Sherriff will oversee the drill program slated to begin on May 9<sup>th</sup>. The program will obtain representative samples from some 30 holes to be drilled on the stockpile. These samples will be subjected to diagnostic and bioleach testing to determine the appropriate approach for treating the concentrate.

Alexis Minerals Corporation, the mine leaseholder, has granted BacTech access to the site so that samples can be obtained for test work. The bioleaching test work will be completed later this year. An environmental baseline study will begin shortly which will take approximately one year to complete.

The anticipated life of the project, beginning with the onset of processing concentrates, will be approximately 6-7 years. Engineering design for the plant and operations will be carried out concurrently with the work program described above. The current anticipated start date for the construction of the plant will be the summer of 2012.

Conceptually, the plant may also have value in being capable of treating other refractory type gold values and waste in the region, and efforts to incorporate this concept may be made at the design stage. If the concept is incorporated as part of the project plan then, clearly, this adds additional value to the project in creating a regional bioleach facility for treating other materials.

6. **Reliance on Subsection 7.1(2) or (3) of National Instrument 51-102**

Not applicable.

7. **Omitted Information**

Not applicable.

8. **Executive Officer**

For further information, contact Ross Orr, President and Chief Executive Officer of BacTech Environmental Corporation at (416) 813-0303.

9. **Date of Report**

May 5, 2011