



## **MANAGEMENT DISCUSSION AND ANALYSIS FOR THE THREE MONTHS ENDED MARCH 31, 2012**

*The following management discussion and analysis ("MD&A") of financial results is dated May 29, 2012 and reviews the business of BacTech Environmental Corporation (the "Company" or "BacTech"), for the three months ended March 31, 2012, and should be read in conjunction with the accompanying unaudited condensed consolidated interim financial statements and related notes for the three months ended March 31, 2012, as well as the audited annual consolidated financial statements for the year ended December 31, 2011 and related MD&A. This MD&A and the accompanying unaudited consolidated interim financial statements and related notes for the three months ended March 31, 2012 have been reviewed by the Company's Audit Committee and approved by the Company's Board of Directors.*

*This MD&A contains certain forward looking statements, such as statements regarding potential mineralization, reserves and exploration results, and future plans and objectives of the Company, that are subject to various risks and uncertainties. There can be no assurance that such statements will prove to be accurate, and actual results and future events could differ materially from those anticipated in such statements. Readers are cautioned not to place undue reliance on these forward looking statements.*

### **A. Core Business Strategy**

BacTech Environmental Corporation (the "Company" or "BacTech") was incorporated by REBgold Corporation ("REBgold" and formerly known as BacTech Mining Corporation) on October 5, 2010 under the Canada Business Corporations Act. Through the completion of the Plan of Arrangement ("Arrangement") transaction as described below, the Company was granted a perpetual, exclusive, royalty free license to use REBgold Corporation's proprietary bioleaching technology ("BACOX") in the remediation business for mining. The technology utilizes bacteria to liberate precious and base metals and has been traditionally used to treat difficult-to-treat sulphide ores and concentrates. The business plan for the Company is to apply the bioleaching technology to abatement and reclamation projects to remove harmful elements such as arsenic and sulphur from the environment, where this can be assisted by a positive cash flow from metal recovery. Examples of metals which can be extracted include gold, silver, cobalt, nickel, copper, uranium and zinc.

Bioleaching is an environmentally friendly process technology for treating difficult-to-treat sulphide ores and concentrates. By replacing smelting and/or roasting with a bioleach process, the production of sulphur dioxide emissions which is the primary source of acid rain, and arsenic trioxide is eliminated. Furthermore, the capital and operating costs of a bioleach facility are significantly less when compared to other existing treatment methods.

### Plan of Arrangement (“Arrangement”)

Effective December 2, 2010, REBgold completed a divisive reorganization by way of an Arrangement whereby a newly formed subsidiary, BacTech Environmental Corporation, was granted rights and interests in REBgold's existing and proposed tailings remediation projects and an exclusive, perpetual, royalty-free licence to use REBgold's proprietary bioleaching technology for reclamation of historic mine tailings and waste rock. REBgold retained the primary rights to the bioleaching technology, as well as all of REBgold's existing project assets.

Subsequent to the Arrangement, BacTech started to trade on the Canadian National Stock Exchange under the symbol “BAC” and REBgold continued to trade on the TSX Venture Exchange under the symbol “RBG”. Under the terms of the Arrangement, REBgold's shareholders received, in exchange for each existing common share of REBgold, one new common share of REBgold (formerly BacTech Mining Corporation) and one-fifth of a common share of BacTech Environmental Corporation.

### **B. Mining Properties and Project**

The mineral properties and deferred exploration costs are comprised as follows:

	<b>Snow Lake</b>	<b>Total</b>
<b>Balance December 31, 2010</b>	<b>32,553</b>	32,553
Expenditures on property	<b>308,706</b>	308,706
<b>Balance, December 31, 2011</b>	<b>341,259</b>	341,259
Third party project contributions	<b>(169,156)</b>	(169,156)
Expenditures on Property	<b>187,490</b>	187,490
<b>Balance, March 31, 2012</b>	<b>359,593</b>	359,593

### **Snow Lake Arsenopyrite Concentrate Stockpile - Manitoba**

In early 2010, REBgold became aware of a reclamation opportunity in Snow Lake, Manitoba. In the 1950's, a gold mine named Nor-Acme was opened and operated at Snow Lake, Manitoba. Approximately 10% of the ore was classified as arsenopyrite (arsenic bearing) and refractory in nature, which required additional treatment to liberate the gold for recovery. Given the high levels of arsenic that reported to the concentrate, conventional roasting or smelting were ruled out as process options and the concentrate was treated by direct cyanidation to recover as much gold as possible. The residue was stockpiled at the mine site to await future technologies capable of extracting the remaining gold values.

REBgold approached the Manitoba Ministry of Innovation, Energy and Mines in April 2010 and outlined a plan whereby REBgold, at its own expense, would use samples obtained from the concentrate stockpile to determine whether the material was amenable to bioleaching for liberating and extracting the gold while stabilizing the arsenic. The Manitoba government granted approval for REBgold to conduct the sampling program, subject to oversight by an independent engineering consulting firm which the government engaged to ensure that there would be no adverse environmental impacts from drilling through the arsenopyrite stockpile.

Pursuant to completion of the Plan of Arrangement on December 2, 2010, REBgold assigned its rights and commitments to BacTech Environmental Corporation. As such, accumulated development

costs and expenditures that have been capitalized and deferred have been transferred to the Company's balance sheet as per the terms of the Arrangement.

In February 2011, BacTech tendered a proposal for the remediation of the arsenopyrite stockpile at Snow Lake under a request for proposals ("RFP") from Manitoba Innovation, Energy and Mines, and in April 2011, was awarded the contract by the Mines Branch of the Manitoba Department of Innovation, Energy and Mines. The contract was finalized in November 2011. 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 stabilizing the contained arsenic.

In May 2011, BacTech announced the completion of a drill program carried out at the arsenopyrite concentrate stockpile. A total of 299.3 meters of sonic drilling were completed in 33 holes. The holes were drilled on a grid at 20 m spacing to obtain core from the entire stockpile. One half of the core was retained in Snow Lake as a permanent record, with half the core taken for geochemical, metallurgical and bioleach samples. Some 432 geochemical samples were taken at 50 cm intervals of which 236 were used for a resource calculation. Saskatchewan Research Council in Saskatoon completed the fire assaying. In July 2011, the Company released the drill results of the program. An average grade of 9.7 g/t gold was obtained from the 33-hole program, which is consistent with previous historic results. Given the large number of samples, the Company advises the reader to visit the BacTech website at [www.bactechgreen.com](http://www.bactechgreen.com) to view a complete list of the drill holes and related samples.

On October 17, 2011, the Company announced the results of a National Instrument 43-101 technical report for the Snow Lake, Manitoba, arsenopyrite residue stockpile (ARS) compiled by Ralph Newson, the independent qualified person who authored the report. The technical report outlines a measured mineral resource of 265,000 tonnes grading 9.7 grams per tonne gold and 2.17 g/t silver for the stockpile. In addition, an indicated mineral reserve of 9,300 tonnes grading 9.2 g/t gold and 2.15 g/t silver is estimated, as is a further inferred mineral reserve of 28,000 tonnes grading 7 g/t gold and 2.4 g/t silver. The samples were assayed at Inspectorate Exploration and Mining Services Ltd. in Richmond, B.C., an approved assay facility. The accompanying table outlines the total ounces for the various resource calculations.

	Tonnes	Gold (g/t)	Gold Ounces	Silver (g/t)	Silver Ounces
Measured resource	265,000	9.7	82,643	2.17	18,488
Indicated resource	9,300	9.2	2,750	2.15	642
Inferred resource	28,000	7.0	6,300	2.4	2,160

The drill samples collected from the arsenopyrite stockpile were also used to determine the metallurgical variability of the stockpile, evaluate pre-treatment scenarios and costs, continue bioleach work on a larger scale for gold extraction, as well as to study the detox/arsenic stability for the oxidized end product.

On March 20, 2012, the Company announced results of the bioleach study program it had been working on for the last several months. The patented BACOX bio-oxidation process oxidized over 95 per cent of the sulphides. This study definitively demonstrates the technology's ability in eliminating future acid mine drainage and the environmental problems associated with the stockpile, which is one of the key drivers of the project. In addition, the bio-oxidation process rendered 88.6 per cent of the gold contained

in the sulphides available for extraction, compared with only 9.4 per cent using conventional gold extraction without oxidation.

The bioleach study is an integral part of the continuing economic study currently under way with Micon International. The economic study is expected to be completed by the end of June 2012. In addition, BacTech has hired Golder Associates Ltd., which is in the process of completing the environmental impact statement required for an Environment Act license.

Newalta Corporation ("Newalta") has agreed to contribute up to \$300,000, as well as provide engineering resources and co-manage detailed engineering for the PEA and subsequent feasibility study. If the Snow Lake project proves economically feasible, the companies have agreed to engage in good faith negotiations for a 90-day exclusivity period concerning Newalta's participation in the development, construction and operation of the project. Newalta has contributed up to \$169,156 towards the Snow Lake Project as at March 31, 2012.

It is BacTech's intention to complete the current study and then seek permission and the necessary approvals to process the stockpile material. This would involve building a bioleach plant in the vicinity to reprocess the arsenopyrite concentrate, stabilize the arsenic, and recover a high percentage of the contained gold. Once the bioleach plant is built, it will be the first operating bioleach plant in North America to remediate a mine waste. The process will extract the gold and produce a stable residue in a manner which is both economic and effective, and would result in a financial saving to the government of Manitoba. BacTech is committed to working with all parties associated with the potential reclamation of the Snow Lake site. Given the fact that the stockpile is already in a concentrate form, the capital cost associated with building a bioleach plant will be significantly reduced. In addition, Manitoba's low energy prices would provide for a beneficial reduction in operating costs, as power can consume as much as 40% of the operating costs for bioleaching.

#### Future Plans

The Company envisions starting construction of a bioleach plant during 2012 in Snow Lake. The current plans for the bioleach plant encompass the treatment of approximately 109 tonnes of stockpiled material per day, or 37,500 tonnes per year. At this rate, the Snow Lake Arsenopyrite Stockpile will take approximately 6 - 7 years to process. Once the reclamation and remediation of the Snow Lake Arsenopyrite Stockpile is completed, the bioleach facility will be adapted to treat similar tailings in the region. The expected life of the facility is estimated to be approximately 25 years.

### **C. Results of Operations**

This analysis of the results of the Company's operations should be read in conjunction with the Company's condensed consolidated interim financial statements for the three months ended March 31, 2012.

#### **Revenues**

The Company has no revenue or sources of recurring revenues at this time.

#### **Operating and Administrative Costs**

Operating and administrative expenses were \$199,540 for the three months ended March 31, 2012 compared to \$230,172 for same period last year. Significant components of this expense include:

1. Salaries, management fees and related costs decreased to \$82,947 for the three months ended March 31, 2012 from \$112,819 in the same period last year. These costs are for the salaries,

wages and management fees incurred directly in managing and operating the business of the company, which includes the investigation and evaluation of potential projects. As the Company further pursues the Snow Lake Project, more management consulting fees have been capitalized which reduces the annual expenses;

2. Share based payments, as explained in note 14 to the condensed consolidated interim financial statements, were \$nil for the three months ended March 31, 2012 compared to \$13,025 in the same period last year. Yearly fluctuations in stock option expense are dependent on a number of factors including, but not limited to, number of options issued, valuation of options, vesting period and timing. For the current period ended March 31, 2012, no new options were granted. For the year ended December 31, 2011, 250,000 options were granted. The expense for the current period is based on the valuations of options granted in both the current period which are recognized as an expense in the current period, based on the portion of options vested in the current period;
3. Professional fees decreased to \$5,896 for the three months ended March 31, 2012 from \$14,256 in the same period last year. Legal fees and professional fees were incurred on project related expenses and general corporate purposes. In the prior year additional legal expenses were incurred due to the Plan of Arrangement,;
4. Costs associated with shareholder information and investor relations increased to \$58,355 for the three months ended March 31, 2012 from \$22,956 in the same period last year. Increases in these costs are due to investor relations programs that are now being used by management to assist with raising awareness of the Company, as well as the development of a video to describe, in simple terms, the bioleach process.
5. Travel costs increased slightly to \$26,870 for the three months ended March 31, 2012 from \$22,986 in the same period last year. These costs are for travel incurred to source and evaluate projects, as well as capital fundraising tasks in the current period.
6. General office expenses decreased to \$25,521 for the three months ended March 31, 2012 compared to \$43,585 in the same period last year. These are expenses for the general corporate office located in Toronto. In the prior year, additional expenditures were incurred to set up the communications and computer systems to support the Company.

### **Finance Charges**

Debenture interest expense for the three months ended March 31, 2012 was \$3,690 compared to \$3,870 in the same period last year. The debenture interest expense for the period reflects the interest expense from BacTech's portion of the debenture issued by REBgold Corporation, as explained in note 11 to the condensed consolidated interim financial statements for the three months ended March 31, 2012.

Accretion expense is related to the Company's debentures as described in note 11 to the condensed consolidated interim financial statements for the three months ended March 31, 2012. This expense reflects the difference, which is recognized as an expense over the life of the debenture, between the face value of the debenture and the fair value at which it is reported in the Company's balance sheet.

### **D. Liquidity and Capital Resources**

At March 31, 2012, the Company had cash of \$18,318 and a working capital deficit of \$591,970. The funds raised from the exercise of warrants and options, and the 3 private placements completed in December 2010, June 2011 and January 2012, were used for general working capital and advancing the Snow Lake Project. Subsequent to the quarter end, the Company completed a debenture financing which raised \$585,000 in gross proceeds.

On May 4, 2012, the Company announced that it had closed the second and final tranche of its convertible debenture financing originally announced on April 19th, 2012. The financing was oversubscribed, raising an additional \$85,000 over its original goal of \$500,000. Total gross proceeds raised in the financing were \$585,000, with \$160,000 of the proceeds closed in the second tranche and \$425,000 of the proceeds closed in the first tranche. In total 58.5 units were issued.

On January 18, 2012, the Company issued 705,000 units at \$0.20 per unit for gross proceeds of \$141,000. Each unit consisted of one common share and one half purchase warrant, with each whole warrant exercisable at \$0.30 until January 18, 2013. Prior to March 31, 2011, the Company had collected \$64,000 related to the private placement which was recorded at the end of the reporting period as shares to be issued.

On June 29, 2011, the Company issued 2,500,000 units in its first tranche of a non-brokered private placement at a price of \$0.20 per unit for aggregate gross proceeds of \$500,000. Each unit consisted of one common share and one half of one common share purchase warrant. Each warrant entitles the holder to purchase one common share at \$0.30 until June 20, 2012. Subsequently, on July 15, 2011, the Company completed the second tranche for the private placement for total gross proceeds of \$100,000 under the same terms as the original tranche.

Between January 1, 2011 and May 3, 2011, REBgold warrant holders exercised a total of 22,051,667 warrants to purchase 22,051,667 REBgold common shares for gross proceeds of \$2,198,100. As per the terms of the Arrangement, the Company was obligated to issue 4,510,331 common shares to these REBgold warrant holders, and the Company is entitled to 17% of the proceeds for a total of \$373,677. In addition, warrant holders exercised 255,000 warrants for 255,000 common shares of the Company for gross proceeds of \$43,350, and option holders exercised 150,000 options for 150,000 common shares of the Company for gross proceeds of \$30,000.

On December 22, 2010, the Company issued 2,526,666 units in a non-brokered private placement at a price of \$0.12 per unit for aggregate gross proceeds of \$303,200. Each unit consisted of one common share and one half of one common share purchase warrant. Each warrant entitles the holder to purchase one common share at \$0.17 until December 22, 2011. All securities issued in connection with the offering and the underlying securities were subject to a four month hold period that expired on April 23, 2011.

<b>Share Capital</b>				
	<b>March 31, 2012</b>		<b>December 31, 2011</b>	
	<b>Number of shares</b>	<b>\$ Amount</b>	<b>Number of shares</b>	<b>\$ Amount</b>
Balance, beginning of period	38,383,361	1,631,624	29,246,673	357,190
Shares issued – property termination payment	-	-	1,221,356	244,271
Shares issued pursuant to exercise of REBgold warrants	-	-	4,510,332	373,687
Shares issued for cash pursuant to a private placement	705,000	77,000	3,000,000	600,000
Exercise of warrants	-	-	255,000	43,350
Fair value from exercise of warrants	-	-	-	5,279
Exercise of options	-	-	150,000	30,000
Future share issuance	-	-	-	64,000
Fair value from exercise of options	-	-	-	14,940
Less:				
Warrant fair value from shares issued	-	30,200	-	67,500
Share issue costs	-	3,656	-	33,593
Balance, end of period	39,088,361	1,674,768	38,383,361	1,631,624

#### **E. Quarterly Information**

Selected quarterly information for the most recently completed quarter is presented below in Canadian currency (\$), and in accordance with International Financial Reporting Standards. The Company started operations on October 5, 2010 and had its first period end December 31, 2010. As a result there are only six quarters to present.

	<b>2012</b>	2011				2010
	<b>Q1</b>	<b>Q4</b>	<b>Q3</b>	<b>Q2</b>	<b>Q1</b>	<b>Q4</b>
	\$000's	\$000's	\$000's	\$000's	\$000's	\$000's
Revenues	-	-	-	-	-	-
Operating loss	(207)	(538)	(228)	(339)	(305)	(558)
Loss for the period	(207)	(538)	(228)	(339)	(305)	(558)
Loss per share	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.06)

#### **F. Off-Balance Sheet Arrangements**

The Company had no off-balance sheet arrangements as of March 31, 2012 or December 31, 2011.

#### **G. Financial Instruments**

The Company has not entered into any specialized financial arrangements to minimize its investment risk, currency risk or commodity risk.

#### **H. Outlook**

The current volatile state of the capital markets and the high price for precious and base metals has significantly increased the level of activity for companies in the resource sector or in the remediation and reclamation of mine waste and tailings. Even though there is a heightened interest from the capital

markets to invest in companies in these sectors, there can be no assurance that the Company will be successful in attracting either new financing or new opportunities to apply its technology.

## **I. Risks**

The Company's strategy emphasizes developing projects in order to leverage its intellectual property and drive the creation of shareholder value. This strategy has required, and continues to require, significant financings, and is subject to risks associated with mineral prices, mineral resources and operations. Due to the nature of the Company's business, the present stage of development of its projects, and the constraints placed upon the Company's ability to move forward by its current liquidity situation, readers should carefully review and consider the financial, environmental and operational risk factors affecting the Company.

### **Need for Additional Financing**

The Company currently has no source of operating cash flow, and there is no assurance that additional funding will be available to the Company as and when needed for further exploration and development of its projects, or to fulfill its obligations to its existing creditors. Volatile markets may make it difficult or impossible for the Company to obtain adequate debt or equity financing in the future, or on terms acceptable to the Company. The failure to obtain additional financing could force the Company to liquidate its assets to satisfy creditor claims.

### **Dependence on Management**

The Company's business and operations are dependent on recruiting and retaining the services of a small number of key members of management and qualified personnel. The success of the operations and activities of the Company are dependent, to a significant extent, on the efforts and abilities of the management of the Company. Investors must be willing to rely, to a significant extent, on the discretion and judgment of the management of the Company. Furthermore, while the Company believes that it will be successful in attracting qualified personnel and retaining its current management team, there can be no assurance of such success. The Company does not maintain key employee insurance on any of its employees.

### **Competition**

The Company competes with other engineering companies for the acquisition of mineral rich mine tailings and mine waste that can be developed economically. The Company competes with other engineering companies that have greater financial and technical resources and experience. Such competition may result in the Company being unable to acquire desired properties, to recruit or retain qualified employees, or to acquire the capital necessary to fund its operations and develop its properties. The inability of the Company to compete with other engineering companies for these resources would have a material adverse effect on the Company's results of operations and business.

Currently, the Company's bioleaching technology does not operate in an overly competitive marketplace; however the Company anticipates that it may face increased competition in the future, as advanced technologies become available. While management believes that the Company's technology is more advanced, commercially proven and better situated than its competitors, there can be no assurance that the Company will be able to effectively compete with companies who have or may develop similar technologies and may possess greater financial resources and technical facilities. Competitive pressures, or the inability of the Company to successfully license its technology on terms that are acceptable, may have a material adverse effect on the Company's business, operating results and financial condition.

## **Conflicts of Interest**

Certain of the Company's directors and officers may serve as directors or officers of other reporting companies, companies providing services to the Company, or companies in which they may have significant shareholdings. To the extent that such other companies may participate in ventures in which the Company may participate, the directors of the Company may have a conflict of interest in negotiating and concluding terms respecting the extent of such participation. In the event that such a conflict of interest arises at a meeting of the Company's directors, a director who has such a conflict will abstain from voting for or against the approval of such participation or such terms.

From time to time, several companies may participate in the acquisition, exploration and development of natural resource properties, thereby allowing for the participation in larger programs, permitting involvement in a greater number of programs and reducing financial exposure in respect of any one program. It may also occur that a particular company will assign all or a portion of its interest in a particular program to another of these companies due to the financial position of the company making the assignment.

In accordance with the laws of Canada, the directors of the Company are required to act honestly, in good faith and in the best interests of the Company. In determining whether or not the Company will participate in a particular program and the interest therein to be acquired by it, the directors will primarily consider the degree of risk to which the Company may be exposed and its financial position at the time.

## **J. Other MD&A Requirements**

Additional information related to the Company is filed electronically on the System for Electronic Document Analysis and Retrieval (SEDAR) at [www.sedar.com](http://www.sedar.com).