

BacTech Environmental Secures Tenguel Plant Construction Permit from Ministry of Energy and Non-Renewable Resources

TORONTO, ON, March 24, 2022 – <u>BacTech Environmental Corporation</u> (CSE: BAC, OTC: BCCEF, FSE: 0BT1) ("BacTech" or the "Company"), a commercially proven environmental technology company delivering effective and eco-friendly bioleaching and remediation solutions, is pleased to announce that its 100% owned Ecuadorian subsidiary, BacTechverde S.A.S., has been officially granted its construction permit with respect to its Tenguel – Ponce Enriquez bioleaching plant and project in Ecuador.

On March 22nd the Company received official notification documenting that the Ministerio de Energia y Recursos Naturales No Renovables ("Ministry of Energy and Non-Renewable Resources") has issued a permit to BacTech for the plant construction. A copy of the authorization will be uploaded to the Company's web site.

"This key document was obtained through excellent teamwork and coordination with authorities to complete the process ahead of schedule," said Ross Orr, President, and CEO of BacTech Environmental. "To be clear, BacTech is still responsible for obtaining other approvals as part of the overall permitting process, but having this particular authorization in hand is indeed a very positive development for the project in terms of timing. In all meetings that I have attended, the Ecuadorian Government has committed to helping us achieve an expeditious result for the necessary permits and authorizations, and this is a prime example of their support and delivering on their word."



Ecuador's Vice Minister of Mines, Xavier Vera Grunauer, with BacTech CEO Ross Orr in August 2021

A rough translation of the authorization is as follows:

- 1. GRANTING OF THE RIGHT The Ecuadorian State, through the Ministry of Energy and Non Renewable Natural Resources, Coastal Zone Coordination, grants in favor of the company BACTECHVERDE S.A.S., the present AUTHORIZATION FOR THE INSTALLATION AND OPERATION OF THE BENEFIT, MELTING, REFINING AND CONSTRUCTION PLANT OF RELAVERS called "BACTECH BIOAMBIENTAL" Code 70002419, title by which the personal right is legally and duly conferred to execute the phases of benefit, smelting and refining referred to in letters d), e), f) of Art. 27 of the Mining Law and in accordance with the provisions of Articles 45 and 46 of the aforementioned norm;
- 2. LOCATION The Beneficiation, Smelting, Refining and Processing, Construction Plant called "BACTECH BIOAMBIENTAL" Code 70002419, subject of this authorization is located in the La Fortuna sector of the Tenguel parish, Guayaquil canton, jurisdiction of the province of Guayas.
- 3. TERM OF THE AUTHORIZATION The term of this Authorization for the Installation and Operation of the Beneficiation Plant, Smelting, Refining and Construction of Clinker is 8 years and 4 months, counted from the date of registration in the corresponding Mining Registry.
- 4. PROCESSING CAPACITY The maximum processing capacity of the Beneficiation, Smelting, Refining and Processing Construction Plant called "BACTECH BIOAMBIENTAL" Code 70002419, shall be 50 tons per day.
- 5. PRESENTATION OF REPORTS AND PAYMENT OF ROYALTIES The authorized party must present the reports required by the Mining Law; as well as the payment according to the final paragraph of article 45 of the reformed Mining Law, pay a royalty corresponding to 3% when processing minerals from other mining concessions that generate tailings containing mineral products, within the established dates and during the term of the authorization under the provisions of the Law;
- 6. OBSERVANCE OF SOCIAL AND ENVIRONMENTAL REGULATIONS The mining owner is obliged to strictly observe the environmental and social regulations contemplated in the Mining Law, Environmental Management Law, General Regulations of the Mining Law, Environmental Regulations for Mining Activities in the Republic of Ecuador and other mining regulations in force;
- 7. COMPLIANCE WITH ARTICLE 26 OF THE MINING LAW. It is the obligation of the concessionaire to comply with the provisions of the Mining Law, i.e.: "In order to carry out mining activities, it is required, in a mandatory manner, motivated and favorable administrative acts previously granted by the following institutions within the scope of their respective competences: a) From the Ministry of the Environment, the respective environmental license duly granted; and, b) From the Sole Water Authority, regarding the

eventual impact on surface and/or subway water bodies and compliance with the order of priority over the right to access to water. Additionally, the mining concessionaire shall submit to the Sectorial Ministry a sworn statement made before a notary public stating that the mining activities do not affect: roads, public infrastructure, authorized ports, sea beaches and seabed; telecommunication networks; military facilities; oil infrastructure; aeronautical facilities; electrical networks or infrastructure; or archaeological remains or natural and cultural heritage (...)". This Ministerial Unit, by virtue of complying with the stipulations of the current legal regulations, is empowered to take the pertinent legal actions in order to ensure unrestricted compliance with the Mining Law.

- 8. OBLIGATION TO SUBMIT CLOSURE PLAN The holder of this authorization is obliged to submit to the Ministry of Environment, Water and Ecological Transition, the Closure Plan of the current facilities in which the beneficiation plant operates as well as the respective tailings dam(s) as determined by the Mining Law.
- 9. MINING-INDUSTRIAL SAFETY AND HYGIENE The licensee is obliged to preserve the mental and physical health and life of its technical personnel and workers by applying the mining-industrial safety and hygiene standards, in accordance with Art. 68 of the Mining Law. Consequently, the authorized shall be obliged to have approved and in force an Internal Regulation of Occupational Health and Mining Safety, subject to the provisions of the Mining Safety Regulation and other pertinent regulations issued by the corresponding institutions; the use of mercury for the refining, smelting and benefit process of the mineral is strictly forbidden, therefore, the owners of the benefit plants must have a substitute technology for the benefit of the processed mineral.
- 10. ADMINISTRATIVE PROTECTION The State, through the Agency for Regulation and Control of Energy and Non-Renewable Natural Resources, shall grant Administrative Protection to the holders of mining rights in the event of complaints of trespassing, dispossession, invasion or any other form of disturbance that prevents or threatens the exercise of their mining activities;
- 11. TERMINATION OF THE AUTHORIZATION The rights derived from the present Operating Authorization of the Beneficiation Plant shall be terminated due to the causes determined in the Mining Law, its General Regulations; Environmental Regulations for Mining Activities and other applicable regulations.
- 12. PERSONNEL TRAINING The Beneficiary of this resolution is obliged to maintain permanent training and qualification processes and programs for its personnel at all levels. Said programs must be periodically communicated to the Ministry of Energy and Non-Renewable Natural Resources, Vice Ministry of Mines. Likewise, in their operation plans and in coordination with the Agency for Regulation and Control of Energy and Non-Renewable Natural Resources, the mining owners shall welcome in their facilities students of second and third level of education to carry out practices and internships;
- 13. NOTARIAL AND REGISTRATION ACTS For the full validity of this Public Instrument, its holder is obliged to notarize it in any of the Notary Offices existing in the

national territory and to register it in the corresponding Mining Registry, within a term of thirty days from the date of its notification;

- 14. OBLIGATION TO DELIVER THE AUTHORIZATION AND EFFECTS OF INVALIDITY: The beneficiary is hereby warned of the obligation to deliver to the Ministry of Energy and Non-Renewable Natural Resources, Coastal Zonal Coordination, within fifteen days from the date of its registration, a copy of the authorization duly registered. The lack of delivery will determine its invalidity as determined by the Mining Law and its General Regulations;
- 15. NOTIFICATIONS: The owner of the Beneficiation, Smelting, Refining and Clinker Construction Plant called "BACTECH BIOAMBIENTAL" Code 70002419, the Ministry of Environment, Water and Ecological Transition, and the Agency for Regulation and Control of Energy and Non-Renewable Natural Resources, Guayas Zonal Coordination, shall be notified of the content of this resolution.

About the Tenguel – Ponce Enriquez Bioleaching Project

BacTech is planning to build a new owner-operated bioleaching facility in Tenguel, near Ponce Enriquez, Ecuador, in a region where arsenic is associated with gold ore (Arsenopyrite). The Company's plan is to build a 50 tpd bioleach plant capable of treating high gold/arsenic material. A 50 tpd plant, processing feed of 1.75 ounces of gold per tonne, similar to feeds available to the Company from local miners, would produce approximately 31,000 ounces per year. Plant designs are modular and can be expanded without affecting ongoing production. The total concentrate market in the Ponce Enriquez area is estimated to be between 200 and 250 tonnes per day, allowing for increased throughput potential with a larger plant.

Key economic highlights:

- Pre-tax NPV (Net Present Value with 5% discount rate) of \$60.7M
- Pre-tax IRR (Internal Rate of Return) of 57.9%
- Annual Gold Production of 30, 900 ounces
- Capital Cost of \$17M
- Bioleach Operating Cost of \$212 per tonne
- Assumed Purchase Prices of Concentrate 65% of the contained gold value
- Pre-tax Earnings Prior to Employee Bonus \$10.9M annually
- Estimated local employee bonus pool \$1.64M
- Payback (70% DEBT) 2 years

In total, there are over 90 small mines operating in the area. BacTech intends to return local miner compensation back to previous payment levels, prior to a sweeping price reduction imposed by Chinese buyers due to recent import levies on arsenic/gold concentrates entering China. BacTech continues to investigate the prospects of establishing additional modern bioleaching facilities across other areas of Ecuador, Peru, and Colombia. Where possible, the Company will partner with national and local governments, non-governmental organizations (NGOs) and others to assist with the funding of these projects and ensure that they meet the Company's high expectations not only for environmental standards, but also for the highest standards in all ESG considerations.

About BacTech Environmental Corporation

BacTech is a proven environmental technology company, delivering effective and eco-friendly bioleaching and remediation solutions to commercial operations to process and recover preferred metals (gold, silver, cobalt, and copper) smartly and safely remove and transform harmful contaminants like arsenic into benign EPA-approved products for landfill. Tapping into numerous environmental and economic advantages of its proprietary method of bioleaching, BacTech uses naturally occurring bacteria, harmless to both humans and the environment, to neutralize toxic mining sites with high-pay potential. BacTech is publicly traded on the CSE under the symbol "BAC"; on the OTC as "BCCEF"; and the Frankfurt Stock Exchange as "0BT1".

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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 using 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 because 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: 163,805,558

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.

This press release does not constitute an offer to sell or a solicitation of an offer to buy any of the shares, nor is it a solicitation of interest from a prospective investor.