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#### HYDROGEN SULPHIDE

THE INFINITE SOURCE

# Tell us your business in 30 words & answer these 5 questions.

BIO-H2-GEN Inc. owns the patent-pending clean energy Knapp Process which targets dissolved hydrogen sulphide in municipal wastewater treatment infrastructure reducing their treatment costs while simultaneously producing the clean zero-carbon hydrogen. A "win-win" for municipalities.

## [1] What made you start your business?

William Knapp, Scientist and Inventor, Co-Founder and CEO of BIO-H2-GEN Inc., has spent a great deal of time seeking a less expensive method of producing hydrogen than is used today. He realized, from the start, the importance of avoiding Climate Change emissions. The extensive research that followed his hypothesis in 2006 has resulted in the creation of the *Knapp Process*. The product of his research and innovative concept was a solution for reforming hydrogen sulphide more effectively *at less cost to the municipality* and simultaneously produce the clean energy carrier hydrogen. A successful laboratory experiment validated his hypothesis and led to patent applications.

# [2] How will you respond to new competitive technology?

We use technology every day to inform and increase our knowledge of new teaching in the area of biotechnology related fields and how technological advances are helping our world to lessen our carbon footprint and thereby help to mitigate climate change with greener solutions for business. The *Knapp Process* will be using advanced technology in the creation of a pilot plant for optimization enabling rapid global deployment. We will remain more competitive by ensuring a commitment to provide a greener, cheaper and cleaner method of delivering the sustainable energy carrier zero-carbon hydrogen gas with global distribution.

### [3] What are your business goals over the next 6 to 18 months?

BIO-H2-GEN Inc. is an Ontario Company seeking funding to build a pilot plant in an Ontario community (or foreign) to optimize the *Knapp Process* thereby effectively reducing the cost of treating hydrogen sulphide in municipal waste water treatment facilities. In the next 6 to 18 months BIO-H2-GEN Inc. wants to operate a modular pilot plant to establish engineering scale-up data, patent globally and develop an exit strategy.

### [4] How much capital and operational support will help achieve these goals?

\$3.5M CAD will enable BIO-H2-GEN Inc. to [1] cover the cost of an engineering work-up to determine a more accurate total costing for the design, construction, testing, delivery and training for a modular pilot plant. [2] It will come close to final costs of acquiring and operating the pilot plant for 12 to 24 months depending on size and number of employees required. [3] It will also assist in the cost of patent application filing fees in selecting the most ideal countries and regions. With a patent grant the *Knapp Process* will provide 19 years of market protection and assure increasing acquisition of the *Knapp Process* in the selected countries of filing. The *Knapp Process* provides municipalities with a zero carbon process which will significantly decrease the cost of wastewater treatment (as well as meet environmental regulations) and produce significant *zero-carbon hydrogen*.

# [5] How can your business make an impact in your community?

Currently, municipalities are using a costly chemical and equipment processes in dealing with the hydrogen sulphide problem and it is not only expensive, it adds to the carbon footprint. The *Knapp Process* has a zero carbon footprint. The current electrolysis of water process takes more energy to strip the hydrogen off water than you get back and it is therefore negative energy. The *Knapp Process* will provide a state of the art, in the world, for water treatment and a zero carbon footprint of the process to help with increasing environmental concerns and coupled with saving the taxpayer on reducing the cost of municipal wastewater treatment. BIO-H2-GEN Inc.'s operation of the *Knapp Process* will provide new permanent jobs and increased revenues from process refining. The community also benefits from ancillary service and supply businesses. Accommodation and meals will be required by foreign visitors anxious to witness the demonstration of the *Knapp Process* prior to negotiating acquisition of the *Knapp Process* being installed in communities of their country of origin. An enormous global market simply awaits pilot plant optimization.

