

February 24, 2009

To Whom It May Concern:

My name is David Schindler. I am the Killam Memorial Professor of Ecology at the University of Alberta in Edmonton, Alberta, Canada and Chair of the Safe Drinking Water Foundation (SDWF). For a detailed description of my work and professional accomplishments, please see my profile at [www.safewater.org](http://www.safewater.org). This is a letter of support for the SDWF, Dr. Hans Peterson (Principle Research Scientist at SDWF), and the research endeavor currently being sought in China.

I have known Dr. Peterson as a professional and a friend for over four decades. Beginning in 1982, I worked with Dr. Peterson at the Freshwater Institute in Winnipeg, Manitoba, Canada for five years and was impressed with his thoroughness and desire to resolve complex and perplexing issues. I have served as the Chairman for the SDWF since 2003. During this time, I have had the pleasure to work and collaborate with exceptional scientists from throughout the world concerning environmental and drinking water quality issues. Dr. Peterson and his research team at the SDWF can be held with the highest level of confidence concerning ethical and sound research practices. Their work with aboriginal people is particularly admirable. They have been able to supply several communities that had terrible water supplies with excellent drinking water, and have trained local people to run the equipment. For these reasons, I strongly support the research endeavors of Dr. Peterson and the SDWF.

Specifically, I would like to comment on the research and practical successes of the Integrated Biological and Reverse Osmosis Membrane (IBROM) treatment system devised by SDWF scientists. The IBROM system is an unconventional drinking water quality treatment system that has unprecedented treatment capabilities and, environmental (i.e., uses 98% less water for backwashing) and economic benefits (i.e., saves thousands of dollars in chemical costs). The IBROM treatment system is unique from conventional systems (i.e., Manganese Greensand filtration) in that it removes (i.e., oxidation) unwanted impurities (e.g., iron, sulfate, arsenic, etc.) in source water using naturally occurring microorganisms in a controlled environment. This process allows naturally occurring bacteria to harvest the impurities within their cells, leaving no need to add chemicals or oxidants (i.e., potassium permanganate, etc.), resulting in very limited chemical use. Biological filtration is remarkably more effective than conventional treatment systems and it is estimated that the installation of the IBROM system at George Gordon First Nation in Saskatchewan has saved the community of 1200 people over \$100, 000 annually in chemical costs, labor, backwashing, and the replacement of membrane filters. However, it is the quality of life improvement resulting from safe drinking water that demarcates the IBROM system from other conventional treatment systems.

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The success of the IBROM system can be seen both quantitatively (i.e., empirical analysis) and in practical terms. For example, Yellow Quill FN (located approximately 300 km from Saskatoon, SASK) had been on a boil water advisory from 1995-2004 as a result of extremely poor source water and ineffective drinking water treatment processes (i.e., Manganese Greensand filtration). It wasn't until Dr. Peterson and SDWF scientists developed and implemented the IBROM system at Yellow Quill FN that the boil water advisory was finally lifted. Now, Yellow Quill residents have drinking water that is second to none and is of higher quality than most Canadian cities. That's tangible success! As well, three other First Nation communities (Paskwa, Saddle Lake, and George Gordon FN) have become recipients of the revolutionizing IBROM treatment system, resulting in truly safe drinking water for their communities. It is with the hopes of awareness and sage judgment, that the IBROM system will be implemented on a global scale, resulting in safe drinking water for remote and impoverished communities throughout the world.

The project currently being sought in China is an excellent example concerning the dissemination of valuable scientific information and practical solutions to improve quality of life throughout the globe. The implementation of this project in China would provide the much needed exposure and would result in similar projects throughout China and internationally. This would result in a drastic improvement in quality of life for impoverished and forgotten rural people. For these reasons, I strongly support this project.

In closing, it is my opinion, that the IBROM treatment system should be implemented in as many communities as possible throughout the world. I endorse any project undertaken by the SDWF that involves such an endeavor. Because of its many benefits and sustainable practicality, I strongly support this technology and urge its implementation throughout Canada and abroad.

Sincerely,

A handwritten signature in black ink, appearing to read 'David W. Schindler', written in a cursive style.

David W. Schindler, OC, AOE, FRSC, FRS  
Killam Memorial Chair and Professor of Ecology