

MARCH 2006

Safe Drinking Water Foundation: Overview

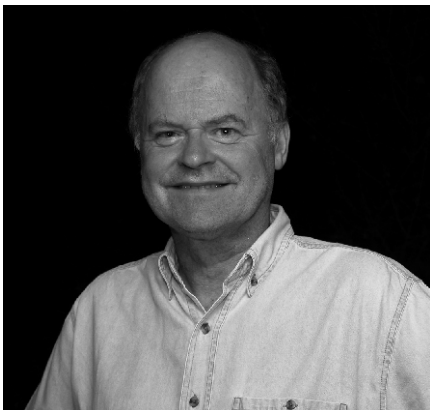


SDWF was founded in 1997 because safe drinking water was not a reality in many communities around the world. In 1999 the Board of Directors of SDWF realized that Canadians living in rural and aboriginal communities were no exception, and SDWF has, for the past six years, focused on increasing awareness, improving education and making safe drinking water a reality for rural people.

The world of safe drinking water in native communities has not even come close to Canadian universities and researchers! Now, of course a lot of professors will disagree, but show me any work that has had direct impact on how native communities deal with either drinking water or wastewater and I would gladly change my mind. Or, ask Health Canada if they can provide raw and treated water data for the communities they are testing every month! And, show me the engineering companies that have come up with water treatment processes that are both effective and sustainable in dealing with really poor water and I would be doubly happy.

Safe drinking water is not about academic niceties where scientists produce papers, it is about the health of entire communities. I estimate that the majority of native communities in Canada have unsafe drinking water. Health Canada is slowly but surely admitting to some of this too, although Indian and Northern Affairs Canada (INAC) has been far more active in trying to resolve the challenges. Still, not very fast.

Financial statements for the Safe Drinking Water Foundation fiscal year end December 31st 2005 will soon be available and will be posted on-line at www.safewater.org. When we look at the numbers it is amazing to us that once again, we have accomplished so much with so little. SDWF continues to forge ahead "doing the right thing", proving that ethics do determine the true bottom line! We are so truly grateful to all our donors and volunteers who have made it possible for all the communities who have been so positively affected, and for SDWF to be where we are today.



Dr. Hans Peterson, Ph.D.
Voluntary Executive Director

We feel we have a responsibility to share scientific knowledge; a responsibility to act; and a responsibility to provide safe drinking water for Canadians when government departments are neglecting their responsibilities. One community at a time we are making a difference. We hope you too will share our responsibility and support SDWF with a donation.

Advanced Aboriginal Water Treatment Team

We are training native people so that they can take correct action to ensure accountability, and ultimately safe drinking water. Indeed we have now established an Advanced Aboriginal Water Treatment Team (AAWTT) comprised of:

- Tony Steinhauer, the Water Keeper from Saddle Lake First Nation in AB
- Roberta Neapetung, the Water Keeper at Yellow Quill First Nation in SK
- Bob Pratt, the Water Keeper at Gordon First Nation in SK

Several more water treatment operators are currently being trained to join this team.

In 2005 Tony and Bob accompanied me to a Membrane Filtration workshop in Arizona. We participated with highly technical delegates from many influential organizations across North America. We were pleasantly surprised to learn how advanced our knowledge has become while working on exceptional challenges in many aboriginal communities. We have already implemented strings of solutions in several communities.



Community Support

At Saddle Lake FN we are developing integrated biological and RO treatment systems. We have also worked closely with the Chief, Council and Elders as they have battled Health Canada. Indeed SDWF scientists were able to prove to Health Canada that a Boil Water Advisory (BWA) was necessary despite HC repeatedly stating the water was safe to drink. In fact I am personally supporting Saddle Lake FN to establish a pilot scale research laboratory to help Saddle Lake and other First Nation communities find solutions to abysmal quality raw water sources.

Conferences

As you see from the following meetings our team has started to make presentations to different audiences. Tony will be presenting for Aboriginal Forum conference “Safe Water for First Nations”, Financing and Developing Infrastructure for Effective Water and Wastewater Treatment; April 20-21 2006, in Toronto and May 11-12 2006, in Vancouver, where also Bob and Roberta are presenting. Roberta and I presented at the United Nations in April of last year, at the request of Indigenous Environmental Network USA. At the time of the Vancouver meeting I will be presenting our work in Muhlheim, Germany. The company that is producing the biological attachment material, Maxit Group out of Europe, is now using our work in their world-wide promotion of biological treatment. We were the first in the world to use their material for Arsenic removal, and the first in North America to use it for drinking water treatment. The Advanced Aboriginal Water Treatment Team is now working on developing procedures so that we can hold our own water treatment workshops, so there is no need to go abroad to receive adequate training.



Presentations

We are continuing our efforts to present to local communities. While I used to make most of the presentations I am now happy to work with a team of very knowledgeable people that can also discuss drinking water issues in different regions. Thanks goes to all the people involved in this, including; Howard Cardinal (Elder Saddle Lake FN), Tony Steinhauer (Saddle Lake FN), Bob Pratt (Gordon FN), Roberta Neapetung (Yellow Quill FN), Simon Kapaj M.D. (SDWF Saskatoon). Currently we are training several more people in four aboriginal communities and they will be added to next years list.

Education - Operation Water Drop (OWD)

Our school program Operation Water Drop (OWD) has once again been recognized as a program of Excellence in Environmental Education with financial support from Green Street (McConnell Foundation). This year OWD was expanded to include 13 different analyses for high school students and was also developed to provide 7 analyses for elementary students. OWD also includes analysis for Arsenic as one of the new parameters. In addition we also developed Operation Water Flow (OWF), a number of lesson plans from K to grade12 to be taught in different subject areas such as Social Studies, Math, Language Arts, Chemistry, to ease the burden of environmental education from the Science teacher alone. To round off the entire education process Operation Water Spirit (OWS), indigenous lesson plans were developed from K to grade 12 by a very gifted aboriginal Principal. Lesson plans for OWF and OWS are all available to be downloaded, free of charge, on our website. We are humbled by the fact that Saskatchewan Research Council, although they, and other federal and provincial departments, declined to sponsor our program, thought our education program was such a great idea they decided to imitate our efforts and provide a similar program with tax payer dollars. I guess imitation is the ultimate compliment!

Education - Template for Change

Green Street also recognized our program Template for Change as another program of excellence in environmental education. It includes 12 DVDs of recordings from our conference a year ago (The Future of Water Treatment) which we encourage students or citizens to host local community workshops to increase awareness and education of issues surrounding safe drinking water. In it, scientists from around the world are discussing the real problems in drinking water, and until we are able to solve those problems, all we will have achieved is a perception that drinking water is safe. And perception is not reality. Both INAC and Health Canada are now starting to realize that SDWF may be a pain, but our science is very good and can only be ignored at their own peril!

Education - National Curriculum Development

SDWF is also pleased to have been invited to participate in Learning for Sustainable Future (LSF) national curriculum development for environmental and sustainable education.

Community Water Test Kits

At the request of local municipal councilors and rural water treatment operators, we have also developed Community Water Test kits. Scientists have formulated a total of 11 analysis; Arsenic, Colour, Copper, Hetrotrophic Plate Counts, Iron, Manganese, Nitrate/Nitrite, Residual Chlorine, Sulphate, and we include a Total Dissolved Solids (TDS) Meter for repeated TDS analyses. These kits are available for only \$100, far below the cost of sending samples to laboratories for testing, and providing communities or individuals with immediate results.

The SDWF constantly receives inquiries from many concerned citizens about their community drinking water supply. Most communities that SDWF has been able to analyze has been determined to be providing unsafe drinking water. Hundreds of other communities are requesting SDWF support and advice regarding serious water quality issues - we are counting on your help in order that we can help these people!

Publications

I have continued to write articles for national publications such as Aboriginal Times, Canadian Water Treatment Dealer and ReNew Canada. Indeed it was following one of these articles, where I asked Health Canada lawyers to define the meaning of due diligence for Health Canada employees, that we were evicted (with two weeks notice) from the space we had occupied in an Environment Canada building since 1997. We now have much more suitable office space where our employees are no longer routinely intimidated.

Training - Water Treatment

When the people of Kashechewan First Nation were evacuated due to unsafe drinking water the CBC interviewed me at length. I suggested that many other First Nation communities also had unsafe drinking water, despite huge funds being spent (often quite recently) on upgraded water treatment plants. These plants are designed by engineers who don't even test the quality of drinking water after they are built! Many engineers took offence to my remarks. But if this is what it takes to make people of all walks of life more accountable then so be it. Some may claim lack of training as the reason for unsafe drinking water - one then has to ask, "Is the training program adequate?" In my experience we have very dedicated operators in most communities, but they receive training that can at best be described as irrelevant. The other pervasive problem is that the operators don't have the water treatment equipment to make the water safe. It is like trying to use a tea strainer to remove coffee grounds - you need a coffee filter!

Media

On February 20th CBC coordinated a national radio documentary "Slow Boil", about First Nation Water issues. We are humbled to have been instrumental in this broadcast, and pleased that drinking water is finally getting the exposure it deserves, and hopefully government departments can be motivated to positive action. Links to the documentary are available for all visitors to our website, www.safewater.org.

Health Research

We have one donor who has consistently supported us every single year since the beginning of SDWF in 1997, and our sincere thanks go to George Weston (Superstore)! In 2005, Tamara Rebanks, a Director of George Weston, selected SDWF as her designated personal charity. In partnership with Gordon's First Nation and University of Saskatchewan Toxicology Department, George Weston support has enabled us to hire a medical doctor to work on the Effects of Arsenic and Human Health. We have just learnt that a first scientific paper has been accepted in the Journal of Environmental Science & Health, an international peer reviewed publication.

SDWF Membership and Support

Individuals, communities, agencies, foundations and corporations can support SDWF through membership and donations.

Membership: Individual = \$20; Community = \$100; Corporate = \$1000