

## Why the Rules Don't Work

One of the biggest challenges to First Nations drinking water management is inadequate regulations and guidelines. As mentioned in our previous articles, the rules (as they are) provide the wrong incentives to stakeholders in First Nations water management.

While Indian and Northern Affairs Canada (INAC) claims no responsibility for the quality of safe drinking water, they retain all the decision making power for its provision. INAC approves all funding for design, construction, operation, and personnel training of water treatment facilities on First Nations land. This means that all contractors, engineers, trainers and operators have absolutely no incentive to consult or confer with the communities they serve, nor do they have incentives to ensure continued good use of facilities within the community.

INAC decides what design for a new treatment plant should be tendered, but it is not required to consult with any engineering or scientific experts when making that decision. What is more, engineers provide quotes and bid on jobs as requested by INAC, but at no time does INAC give engineers the option to advise recommended treatment systems. Neither does INAC require that the engineers guarantee their work. On top of this there is no procedure for testing if treatment plants are capable of treating drinking water properly once they are constructed.

Part of the reason is that treating poor quality water is difficult and requires scientific expertise – and engineers are not scientists. Without consultations and recommendations from knowledgeable professionals, such as scientists, INAC treatment plants will continue to fall short of their communities' needs. In Gordon First Nation, three engineering companies upgraded the water treatment plant over a fifteen year period with no success. Two years ago, a panel of experts talked to many different First Nations communities. The panel said they heard many stories where outside experts agreed that “facilities could not meet regulatory standards because the design did not meet current needs”. Why does INAC keep spending millions of dollars building ineffective water treatment plants?

The current set of rules also falls short with regards to testing drinking waters. There are 56 parameters in the Canadian Water Quality Guidelines, 41 of which are potentially dangerous for humans. Current guidelines only require water operators to regularly test water for five different contaminants. Another thirty five factors are only tested once a year by Health Canada (HC). This testing does not account for seasonal changes in water, such as spring runoff, when flooding can contaminate source waters. It also doesn't account for special geographical regions, such as the Alberta tar sands, where water can have high levels of dangerous contaminants which lie outside the 56 parameters and, therefore, are not tested for.

One big problem with the rules is that they are not rigorously applied. An internal review by INAC and HC showed that less than half of First Nations communities monitored their water every week as required. The same evaluation found that HC did not test almost half of communities for one chemical every three months, and 23 percent were not tested for various other chemical contaminants every year.

INAC also did not annually inspect all water treatment systems as required by their organizational standards.

What seems obvious is that the rules we have in place now are inadequate to ensure safe drinking water and lack enforcement. In a previous article, the Safe Drinking Water Foundation (SDWF) had suggested that an independent national regulator could be created to enforce standards, but this should go hand in hand with a redefining of current rules and guidelines. Simply enforcing the rules more will not improve conditions if the rules themselves are faulty and could actually penalize First Nations communities for rules and policies they didn't create.

While this may paint a dismal picture of First Nations water management, there are examples of hope! Yellow Quill First Nation is a community of one thousand people in Northeastern Saskatchewan, a region where source waters tend to be low quality and difficult to treat. Yellow Quill's drinking water problems stemmed from their source water, a creek that only flowed each spring when the town of Kelvington released their community sewage into it! As a result, the community was put on a boil water advisory from 1995 to 2004. Engineers repeatedly attempted to treat water with conventional technologies, but these efforts continued to fail. The systems in place were like using tea strainers for making coffee. There was no chance of getting safe water until the SDWF stepped in. We helped Yellow Quill to put in an integrated biological system and Yellow Quill now has probably the highest quality of drinking water in all of Canada and one of the smallest environmental footprints. In fact, in 2004 when the water treatment plant was commissioned a quarter was tossed into the reservoir, it is as clearly visible today as it was four years ago!

SDWF believes that the current set of rules and guidelines needs to be seriously reconsidered in scope and applicability. SDWF is working hard to make this a reality. We would like to hear your concerns and suggestions, you are welcome to send information to us anonymously and we guarantee we will respect your privacy. If you are interested, please return the attached survey and a member of SDWF's Advanced Aboriginal Water Treatment Team will be happy to call you.

*This article includes information from the Report of the Expert Panel on Safe Drinking Water on Reserve, Volume 1 as well as the Summative Evaluation of the First Nations Water Management Strategy Project. If you are interested in the facts and figures in this article, you can find references and more information on our website [www.safewater.org](http://www.safewater.org) under "Policy".*