



# Seeing Red Tape

Innovation in the Canadian water sector can only happen if we loosen our rigid conformity to the past. BY AARON ATCHESON

**ACROSS TRADITIONAL** and new media, stories now appear regularly about various advances in drinking water and wastewater treatment, water efficiency, water desalination, and more. In many jurisdictions across North America, both public and private enterprises will require significant updates in water and wastewater infrastructure in the near future, appearing to create a significant opening for new technologies. Unfortunately, there are a number of reasons why a potential golden age for advances is more likely to be a more moderate period of change. A necessary reduction in legal red tape is the endeavour that will require the most coordinated and sustained effort.

Readers of Water Canada will be familiar with the institutional constraints on technological adoption within the water field. This industry is remarkable for its low risk-taking behaviour; many would say such behaviour is appropriate given the potentially disastrous results if an immature technology is adopted to the detriment of public health or the environment. Politicians balk

at the combination of a technology not yet universally accepted with the significant costs involved with a major infrastructure project. Essentially, the industry continues to struggle to make its case with many elected officials that the payoff from new technologies is worth the risk.

Another inhibiting factor is the cost of water. When water is almost free, with less than full cost recovery, any investment has an unusually long payback period compared to other infrastructure projects. The success of water conservation efforts is likely to exacerbate problems relating to cash flow unless utilities significantly restructure their water charges.

One major challenge in the sector is the considerable red tape that restricts the adoption of new technologies by all involved, including those private enterprises and citizens eager to innovate. We can categorize these restrictions as either those targeted at addressing emerging public-health and environmental risks, or those related to the inability of new technologies to fit

within existing frameworks.

The first category of legal restrictions is closely tied to the history of failures of both legislation and existing industry systems to protect public health and the environment. For example, the tragedy in Walkerton, Ontario resulted in significant legal and regulatory changes. Fourteen years later, certain principles championed in the aftermath of the tragedy, such as source water protection, are still being translated into practical requirements for those living and working in the province. And while some have argued that the concentration should have been on greater enforcement of existing requirements, the public clearly demanded that the provincial government put new rules in place to significantly reduce the risk that such a tragedy might happen again. These restrictions are likely to remain a permanent part of the regulatory environment; few politicians would have the courage to press for the rollback of such regulations.

The second category of legal restrictions deals with how, in most circumstances,

the legislation put in place by our elected representatives is very good at institutionalizing the status quo and very bad at foreseeing the use of different tools and systems. Technology in place at the time a legislative system is structured has a huge unearned advantage because it fits within the current regulatory system. Over the years, modernization of regulation may occur, but this often only incorporates minor changes that do not allow for full-scale replacement of earlier technologies or systems.

Fortunately, due to the vast amount of information available to the public today, it is easier than ever to see that others are doing a better job at accommodating new technologies and trends. This can be used to press for changes in our own communities. For example, jurisdictions like Australia and Arizona have experienced severe drought conditions and have become the leaders in permitting and promoting the use of greywater. Arizonans no longer require

permits for simple greywater systems so long as they follow a list of best practices. Pressing local governments to allow for similar changes, while learning from the missteps in those jurisdictions, is a necessary and important tool in facilitating innovation.

Another method of dealing with the inadvertently “sticky” nature of restrictions in such a regulated environment is to foster significant collaboration with government officials. Sector participants may have to invest significant resources to work collaboratively with government representatives to remove unnecessary barriers. For example, it has been reported that London, Ontario’s Trojan Technologies worked with the Ontario Ministry of Environment to develop a multi-site permit system in order to assist in streamlining an application process necessary for their ultraviolet water disinfection systems. Not every government will welcome such an effort,

but when an opportunity presents itself, sector participants need to be willing to invest time and other resources in order to communicate the challenges and the solutions to government representatives.

While governments across Canada seek to support the development of new technology to address modern risks to water quality and advocates demand investment to ensure innovation can be demonstrated and commercialized, all parties need to be mindful of the red tape that must be reduced. By demonstrating successes from other jurisdictions and working with governments to ensure risks are addressed while allowing for innovation, the water sector in Canada can move forward for the benefit of all concerned. WC

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