Walkerton Tragedy

The Walkerton Tragedy is a series of events that accompanied the contamination of the water supply of <u>Walkerton, Ontario, Canada</u>, by <u>E. coli</u> bacteria in May 2000.

Summary

<u>Walkerton</u> is a relatively small community. At the time of the event Stan Koebel was manager and Frank Koebel was water foreman. Neither had any formal training in their position, retaining their jobs through three decades of on-the-job experience. The water supply became contaminated with the highly dangerous <u>O157:H7</u> strain of <u>*E. coli*</u> bacteria, from farm runoff into an adjacent well that was known for years to be vulnerable to contamination.

Starting May 11, 2000, many residents of the community of about 5,000 people began to simultaneously experience bloody <u>diarrhea</u>, gastrointestinal infections and other symptoms of E. coli infection. For days the Walkerton Public Utilities Commission insisted the water supply was "OK" despite being in possession of laboratory tests that had found evidence of contamination. On May 21, an escalation in the number of patients with similar symptoms finally spurred the region's Medical Officer of Health, Dr. Murray McQuigge, to issue a <u>boil water advisory</u>, warning residents not to drink the water.

Seven people died directly from drinking the E. coli contaminated water, who might have been saved if the Walkerton Public Utilities Commission had admitted to contaminated water sooner, and about 2,500 became ill. An experimental drug in <u>Phase III clinical trials</u>, Synsorb Pk, was used to treat 19 children on compassionate grounds under <u>Health Canada</u>'s Special Access Program.

During the time of the <u>tragedy</u>, both Stan and Frank Koebel denied any wrongdoing and firmly held that the water at Walkerton was safe to drink. However, as the tragedy grew in severity the two were eventually part of the criminal investigation into the tragedy, and, as a result, both would eventually plead guilty to a charge of common nuisance through a <u>plea bargain</u>. In their plea, they admitted to falsifying reports and Frank admitted to drinking on the job, as a beer fridge did exist at the facility.

They were both formally sentenced on <u>December 21, 2004</u>, with Stan receiving one year in jail and Frank Koebel nine months of house arrest. Reaction to their sentencing was mixed.

Aftermath

The Ontario Clean Water Agency was put in charge of the cleanup of Walkerton's water system.

An inquiry, known as the Walkerton Commission led by <u>Court of Appeal for Ontario</u> Associate Chief Justice <u>Dennis O'Connor</u>, reported in 2002. *Part 1^I* was released in January 2002. It estimated that the Walkerton water tragedy cost a minimum of \$64.5-155 million <u>CAD</u> and laid much of the blame at the door of the Walkerton Public Utilities Commission.

From the report:

The Walkerton Public Utilities Commission operators engaged in a host of improper operating practices, including failing to use adequate doses of <u>chlorine</u>, failing to monitor chlorine residuals daily, making false entries about residuals in daily operating records, and misstating the locations at which microbiological samples were taken. The operators knew that these practices were unacceptable and contrary to <u>Ministry of Environment</u> guidelines and directives.

The Ontario government was also blamed for not regulating water quality and not enforcing the guidelines that had been in place. The water testing had been privatized in 1996. CBC report)

Part 2 of the report made many recommendations for improving the quality of water and public health in Ontario. All of its recommendations have been accepted by succeeding governments of the province. The recommendations have also influenced provincial policies across Canada.

Key recommendations touched on <u>source water protection</u> as part of a comprehensive <u>multi-barrier</u> <u>approach</u>, the training and certification of operators, a quality management system for water suppliers, and more competent enforcement. In Ontario, these requirements have been incorporated into new legislation.

References:

For an in-depth account of the tragedy, see *Well of Lies: The Walkerton Water Tragedy* (McClelland & Stewart 2002) by Colin N. Perkel.

The many lessons learned from this incident were described by <u>Kim Vicente</u> in his book <u>The Human</u> <u>Factor</u>.

A 2005 <u>CBC Television</u> docu-drama called *Betrayed* was based loosely upon the Walkerton tragedy.

In 2001 a similar outbreak in <u>North Battleford, Saskatchewan</u> caused by the protozoan <u>*Cryptosporidium*</u> affected at least 5,800 people.

Wikipedia "http://en.wikipedia.org/wiki/Walkerton_Tragedy" (accessed January 11, 2013)