

## **Walkerton Case Study:**

The town of Walkerton is located on the Saugeen River and is part of the Municipality of Brockton, which has a population of just under 10,000 people. The drinking water for the town of Walkerton is supplied from a series of wells located around the town. The water is treated at each well before it goes to the Walkerton Public Utilities Commission (PUC) and from there it is pumped to the households.

In May 2000, a waterborne disease outbreak occurred in Walkerton, Ontario. Over 2,300 people became ill and seven people died as a result of *E. coli* 0157:H7 and *Campylobacter jejuni* contamination in their drinking water. An inquiry was called to determine how the water had become contaminated and if charges should be laid against those directly involved with the treatment of water.

The inquiry determined that Well 5 was the source of the contamination. It is a shallow well that is close to a cattle farm. There had been a lot of rain (over 100 mm) the week before the outbreak occurred and manure was washed into the well.

The well was supposed to be inspected daily and water samples taken to determine the amount of free chlorine in the system. However, it was common practice for the person checking the well to not test the water and to make up the amount of free chlorine in the system. Also, the inquiry discovered that water samples sent to an analytical lab were not taken from three different sites as was required but that employees took the samples from the PUC.

The first people to get sick were children and then elderly people. Even when parents were calling to ask about the water, they were told it was fine. Eight days after the manure washed into the well, the manager, Stan Koebel, decided to flush out the system with lots of chlorine. For eight days, the people of Walkerton were drinking contaminated water without knowing it, even though the PUC manager knew. A Boil Water Advisory was issued nine days after the contamination but not everyone heard about it. Some people continued to drink the water without boiling it.



The Minister of the Environment's Office began an investigation, but not much information was found until seven people had already died. The inquiry placed the majority of the blame on Stan Koebel and the foreman, Frank Koebel. The Ontario government was also to blame for not having standardized water requirements. The Inquiry recommended source water protection, the training and certification of operators, a quality management system for water suppliers, and more competent enforcement

As a result of the inquiry, Stan Koebel and Frank Koebel were charged under the Criminal Code of Canada. Stan Koebel was sentenced to one year in jail, but released early, and Frank Koebel was sentenced to 9 months under house arrest.

**Sources:**

- [http://www.archives.gov.on.ca/en/e\\_records/walkerton/index.html](http://www.archives.gov.on.ca/en/e_records/walkerton/index.html) -  
Walkerton Inquiry Reports