

Sample Minnesota Water Case Study

100th Anniversary of Safe Drinking Water for Minneapolis

February 25, 2010, marks the 100th anniversary of a clean, safe drinking water supply for Minneapolis. Today, we take the quality of water flowing from our taps for granted. Only 100 years ago, the citizens of Minneapolis could not. From 1871 to early 1910, Minneapolis drew its water from the Mississippi River untreated and funneled it directly into homes and businesses. As a result, the city suffered an average of 950 cases of typhoid fever each year and about 10% or 95 people died from the disease every year.

Other metropolitan areas had begun filtering and chlorinating their water supplies before 1910. But starting in 1904, the citizens of Minneapolis became locked in a debate over the source and treatment of their water. The winter of 1909 came and the new year, with no resolution to the debate. There were hints, however, of an emerging typhoid fever epidemic.

On January 31, 1910, Richard Beard replied to a Minneapolis Morning Tribune editorial that declared anyone who carelessly used Minneapolis water was suicidal. Berg went further. He insisted such people were homicidal, for they unwittingly or carelessly transmitted the disease to others, like Typhoid Mary. While critical of individuals, Beard blamed cities that did not filter their water even more. Only filtration, he said, purified the water, and he called for the citizens to demand action from the city council.

By February 1910, the epidemic was spreading, and the city's hospitals were full, and on February 27, the Minneapolis Morning Tribune published an editorial with the headline: "Can Cities Dispense Poison With Impunity?" The editorial suggested legal action against the city. By March 10, over 400 people had contracted typhoid and 45 had died, and four days later, the state health board placed the number of infected at between 800 and 1,200.

On March 16, the Tribune no longer hinted at suing the city. Its editorial that day carried the headline: "Will Somebody Please Sue the City." The suit did not come. Minneapolis had acted. In mid February, the city began building a temporary sterilization plant at Pumping Station No. 4 in

Fridley, and on February 25 started adding hyperchloride of lime (chlorine) to its water supply. Almost immediately, the treatment destroyed the typhoid bacilli.

This success (and maybe the talk of law suits) ended the debate and the delays. On March 17, 1910, water supply expert Rudolph Herring submitted a report to the city recommending use of the Mississippi River with proper treatment methods. By the summer of 1910, Minneapolis began work on a purification plant, and on January 10, 1913, the Columbia Heights purification plant opened, using rapid mechanical filtration with coagulation and chlorination. Minneapolis may have been the first city in the Minnesota to chlorinate its water supply. In 1997 Life magazine stated that, "The filtration of drinking water plus the use of chlorine is probably the most significant public health advance of the millennium."

Today, the threats to our drinking water are not as evident or dramatic as typhoid fever, but we cannot take clean water for granted. Once the citizens of Minneapolis believed the water they consumed was safe, they cared less about what they put into the river, and pollution intensified. We have come a long way since then. Completion of the Pigs Eye Sewage Treatment Plant in 1938 and passage of the Clean Water Act in 1972 represent just two key watersheds in how we treat the Mississippi River. But new pollutants are entering the river that could threaten the water we drink. Marking the 100th anniversary of a clean and safe water supply for Minneapolis should help us think about how we treat the river, its creatures and ourselves.

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