

Environmental Case Study

Love Canal:

The Forgotten Wastes of Love Canal

Love Canal is a 16-acre landfill in a residential neighborhood of Niagara Falls, New York. It was intended to be the center of a budding nineteenth-century industrial empire, but the canal never was finished and finally became a dump for industrial waste. This was the beginning of a story that decades later came back to haunt the people of Niagara Falls. It cost them their homes, their health, and hundreds of millions of dollars in rescue efforts.

Early in the century, Love Canal stood empty. It was used mostly as a local swimming hole. In 1942, the city of Niagara Falls began dumping garbage there. The Hooker Chemical and Plastics Corporation, a local industry that had been in the neighborhood since the early days of the canal, also dumped chemical wastes into it. Few people lived in the area, and there was little opposition to the dumping. In April 1945, a Hooker engineer wrote in an internal memo that Love Canal was "a quagmire which will be a potential source of lawsuit." A year later, the company purchased the canal and turned it into a large-scale industrial landfill. Over the next six years, more than 20,000 metric tons of chemical wastes, including highly toxic pesticides, herbicides, and other chemicals--some of them contaminated with dioxins —were dumped into the canal.

In the 1950s, the city of Niagara Falls was growing rapidly and had surrounded the canal. Neighbors complained of foul odor and rats in the dump. It was thought that a solution to both land shortage and pollution problems would be to fill in the site and develop it for housing. In 1953, Hooker sold the site to the Board of Education and the City of Niagara for \$1.00 on the condition that the company be released from any liability for injury or damage caused by the dump's contents. Homes were built on the land adjacent to the canal, and in 1954, a school and playground were built on the top of the chemical dump itself.

Much of the abandoned canal was a swampy, weedy gully with pools of stagnant oily water. Children played in this wasteland, poking sticks in the black sludge that accumulated on the water and throwing rocks at the drums that floated to the surface. Parents complained that their children were burned by chemicals in the canal; dogs that roamed there developed skin diseases, and their hair fell out in clumps. Clearly, something was wrong.

In 1977, an engineering firm was hired to inspect the site and determine why basements in the area were filled with dark, smelly seepage after every rain. They discovered that the groundwater was contaminated with a variety of toxic organic chemicals. Several mothers, concerned about the health of their children, circulated a petition to close the school and adjacent playing fields. As they went from door to door, they became aware that many families had children with birth defects or chronic medical problems, such as asthma, bronchitis, continuing infections, and hyperactivity. There seemed to be an unusually high rate of miscarriages and stillbirths in the area as well. These informal surveys were dismissed by authorities as "housewife research," but on August 2, 1978, New York State ordered the emergency evaluation of all families living within two blocks of the canal.

Those people whose houses were not purchased by the state watched with mixed feelings as their neighbors departed. Suppose the house across the street from you had been condemned but you were just outside the quarantined area and had to stay. How safe would you feel? Residents traced old streambeds that crossed the canal and showed that chemical residues came up in wet areas, sometimes blocks from the dump site. Disputes, public rallies, lawsuits, and negotiations continued for six years.

Finally, 1988, Occidental Petroleum (the parent company of Hooker Chemical and Plastics) agreed to pay some \$250 million in damages to Love Canal residents. Two years later, after twelve years of rehabilitation work, the EPA concluded that four of seven areas in Love Canal are "habitable." (The

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other three are slated to become industrial areas or parkland.) A state-of-the-art containment system has sealed off the dump itself with thick clay walls and two clay caps. The 239 houses immediately surrounding the dump have been demolished. Some 236 previously abandoned houses in the next ring around the dumpsite were sold at bargain prices to people who didn't know or didn't care about their previous history. The government claims that pollution levels have been reduced enough to make the houses safe. Critics argue that the area is still dangerous and that people should not be allowed to live there. What do you think? Would you move into one of those houses? Should others be allowed to do so?

Love Canal has become a symbol of the dangers and uncertainties of toxic industrial chemicals in the environment. The tragedy is that there probably are many Love Canals, some much worse than the original one. No one knows what the total cost of our carelessness in disposing of these chemical wastes ultimately may be.