In the latter stages of the 19th century, a somewhat shady entrepreneur eyed the grandeur of the cascading Niagara Falls in Western New York and saw an opportunity to get rich. His plan: Why not build a canal that would allow boats to circumnavigate the falls and Niagara River, allowing access between two connecting Great Lakes – Erie and Ontario? Further, the speculator, William T. Love, thought the 300-foot elevation change along the Niagara Escarpment would allow him to build power plants that would attract industry to the region. And he designed a “Model City” to house thousands of workers from those new factories, along with stores and taverns to supply essential needs for those workers and their families.

And Love, ever the salesman, attracted investors from as far away as Europe to help finance his dream. Before long, he had acquired an estimated 20,000 acres of land for his project.

But canal excavation had barely commenced at the two ends of the seven-mile waterway when disaster struck. And disaster had a name: Nikola Tesla. Indeed, Tesla’s discovery of alternating current meant that power could be transmitted over long distances. With the new discovery, it was no longer necessary to build factories near the power plant, which was the key component of Love’s plan.
Not surprisingly, the Tesla discovery quickly ended Love’s dream. Financial backers, already squeamish because of a major recession, bailed out in droves. Excavation of the canal stopped after a ditch about 3,000 feet long and 100 feet wide had been dug by steam-powered shovels. Unable to continue, Love’s property was foreclosed and sold at auction in 1910.

Soon after, the unfinished canal filled with water and, for decades, was a favorite swimming hole for the few children who lived nearby. For them, it was a much safer alternative than the nearby Niagara River, which, because of its swift current upstream of the falls, was too dangerous for swimming.

Unfortunately, a new owner acquired the 16-acre parcel in the 1920s. And that owner – the city of Niagara Falls – was not interested in a swimming hole. Ultimately, the new owner’s actions would catapult the Love Canal property into the history books as one of the worst health and environmental disasters in the nation’s history.

Niagara Falls, with a growing industrial base that included plastics, chemicals, steel, and a Nabisco Shredded Wheat plant, was growing rapidly in the period after World War I. Its population in 1920, about 50,760 residents, was nearly 67% higher than the previous decade. By 1930, the city, also a major tourist attraction, grew by another 25,000 residents. With that rapid growth, city managers scurried to provide essential services for the community.

To respond to growing quantities of trash, Niagara Falls bought the former Love property and started using the canal for garbage disposal. Local chemical companies also were allowed to dump hazardous wastes at the site, which was still in a sparsely populated area on the eastern side of the city. “As a result, the seeds of a genuine nightmare were planted. The canal was turned into a municipal and industrial chemical dumpsite,” Eckardt C. Beck, former EPA regional administrator, said in 1979.

Shortly after World War II, the city sold the property to the Hooker Electrochemical Co., a major employer in the region. Hooker used the canal to dispose of an array of highly toxic wastes – residues from its sprawling complex on Buffalo Avenue, bordering the fast-moving Niagara River, a short distance from the falls. The juxtaposition of industry and natural beauty was evident to the thousands of tourists who flocked to the region to witness the majestic waterway.

The main route to the falls was lined with chemical plants, including Hooker. The attraction: Water from the river and cheap power from nearby hydroelectric plants. Unfortunately, visitors to Niagara Falls in the 1940s and 1950s also had to endure a chemical stench that, at times, was so strong that tourists were forced to use handkerchiefs to filter the air.

At its plant, Hooker made an array of products, including chlorine. It also used chlorine in other applications, including chlorobenzene, a key ingredient in the manufacture of pesticides, including the now-banned and notoriously toxic DDT. Chlorobenzene also was used as a key component of certain explosives. Hooker also produced trichloroethylene and phenol, two ingredients used in dry cleaning and degreasing. The company also made arsenic trichloride, thionyl chloride, and hexachlorobenzene. During World War II, Hooker produced dodecyl mercaptan, used in the synthesis of rubber, and later expanded into plastics production.

All of the manufacturing processes produced wastes, some of them highly toxic and many of them known carcinogens. Among the most toxic, according to later tests, was the notorious contaminant often called dioxin. Scientifically, the most toxic form, found in the canal in significant quantities, was 2,3,7,8-Tetrachlorodibenzo-p-dioxin. Strictly an accidental byproduct, this dioxin is a known carcinogen and one of the most toxic byproducts ever manufactured. “Dioxins are highly toxic and can cause cancer, reproductive and developmental problems, damage to the immune system, and can interfere with hormones,” said a toxicology assessment on the US Environmental Protection Agency (EPA) website.
Hooker workers loaded the toxic wastes into 55-gallon drums and the barrels were transported by truck on an eastern route along Buffalo Avenue to the canal a few miles away. At the disposal site, little care was taken about safety, with some drums pushed into the canal cavity while others were emptied into the watery grave so the barrels could be reused. Meanwhile, neighborhood children continued to swim in the canal, occasionally complaining about skin rashes and burns, a likely outcome from contact with toxic chemicals.

In late 1970s testimony included in a detailed August 1980 series on Love Canal by Rae Tyson, environmental reporter for the *Niagara Falls Gazette*, and Louis Peck, writer for Gannett News Service, Jerome Wilkenfield, the Hooker employee supervising the dumping, was quoted as admitting that much of the chemical waste was dumped directly into the canal. “Some of the items indicated they were transported in drums and then drained into the excavations,” he said in a pre-trial deposition.

The admission meant that, without steel drums for containment, very little prevented those toxic wastes from seeping into groundwater. Once permeating the groundwater, toxic chemicals migrated into storm drains, nearby creeks, and the basements of homes adjacent to the dump. While Hooker continued to dump nasty wastes into the canal, the surrounding area was undergoing a transformation. As Niagara Falls continued to grow, the demand for housing increased. Developers started building new homes – mostly modest, single story dwellings – on land surrounding the Hooker dumpsite.

As the blue-collar neighborhood continued to grow, Hooker, possibly sensing that highly toxic chemicals and family homes were not compatible, covered the old canal with a layer of topsoil and, in 1953, generously sold the land for $1 to the Niagara Falls Board of Education, which was planning to build the 99th Street elementary school on adjacent land.

By conservative estimates, Hooker had filled the old canal with 22,000 tons of toxic waste. The property deed contained a clause absolving Hooker of any responsibility. “It was a bad buy,” Beck said in 1979.

The school was opened in 1955 with 400 students. With the exception of two cross streets, nothing was built atop the Hooker chemical grave, although the open space was used as a playground for the school.

For years, buried toxic chemicals coexisted with modest homes, complete with backyard gardens, swimming pools, frolicking children, and family pets. But after several years of heavy rains and abnormal snowfall in the early 1970s, some residents started noticing chemical odors in their homes and yards. And several family pets became ill for no apparent reason.

Finally, after many of the neighbors complained to city officials, they stormed a City Council meeting in October 1976. The residents described their concerns and asked city officials for help. The council meeting was covered by two reporters from the *Niagara Falls Gazette*, the local afternoon newspaper. A story by David Pollak and David Russell appeared in the next day’s paper.

Though neither had a science background, the reporters thought it was odd that relatively new homes would smell like a chemical plant. They convinced editors that it was a story worth pursuing and the *Gazette* reporters collected samples of a smelly, tar-like substance from the basement sump pump of a Love Canal home and had it analyzed by a local laboratory. In November 1976, Pollak and Russell wrote a story about the findings: The sump pump sample contained at least 15 toxic organic chemicals, including three chlorinated hydrocarbons that were considered carcinogenic.

The two reporters also made the connection between the chemicals in the sump pump and the Hooker wastes buried nearby. The connection was, quite simply, an amazing piece of journalism, given the lack of precedent elsewhere in the United States. Not long after Pollak and
Russell broke the Love Canal story, the Gazette hired Michael Brown, its first environmental reporter. Brown advanced the story by making a connection between chemical exposures and health issues among Love Canal residents.

Subsequent tests by the New York Health Department confirmed the presence of contaminants in neighborhood homes. Nevertheless, government agencies failed to evaluate Love Canal residents for health problems related to the buried wastes.

Not long after, two other local papers — Buffalo Evening News and Buffalo Courier Express — also began to aggressively report on the situation in the neighborhood that became known as Love Canal. The lead reporter for the News was Paul MacClenan, a seasoned veteran, and David Shribman, currently executive editor of the Pittsburgh Post Gazette. Primary coverage for Courier Express was done by Bob Dearing, although both Buffalo papers had bureaus in Niagara Falls for supplemental coverage.

The Associated Press largely depended on John Given, a reporter in the Buffalo bureau.

Faced with mounting pressure from the media, residents, and local politicians, New York state decided in July 1978 to pay for the relocation of 235 families nearest the Love Canal chemical graveyard. Though Brown’s attempt to link illnesses with chemical exposure was not science-based, a subsequent New York Health Department study showed a higher rate of miscarriages among Love Canal women.


Though the families closest to the dump were evacuated and a chain link fence installed around the abandoned neighborhood, the environmental disaster known as Love Canal was far from resolved.

Facing pressure from the newly formed Love Canal Homeowners Association and the Ecumenical Task Force, the federal government decided that it would be wise to evacuate the remaining families in a ten-block area surrounding the canal. Part of the pressure came as the result of independent studies conducted by Dr. Beverly Paigen, a cancer researcher at the Roswell Memorial Institute in Buffalo. With help from volunteers, Dr. Paigen found abnormal rates of miscarriages, birth defects, and other health issues.

Because the Love Canal story was unprecedented, it attracted a great deal of media attention. The New York Times had several reporters assigned to the story and the three major networks at the time — ABC, CBS, NBC — all covered the story extensively, either using Buffalo affiliates or sending crews from New York. All the networks were present in 1979 when the Love Canal Homeowner Association took state and federal officials “hostage” at its headquarters on Colvin Boulevard, hoping to extract a White House promise of additional evacuations. The officials were released just ahead of evening news programs.

Faced with extensive media coverage, intense political pressure, and new science about residents’ health problems, another 500 Love Canal families were offered relocation at federal government expense in 1980. Once evacuations were offered, the local Niagara Gazette teamed with Gannett News Service colleagues in 1980 to examine Hooker Chemical claims that it had sufficiently warned the school board about the dangers associated with those entombed chemicals. In a series that previewed facts later confirmed in a federal lawsuit against Hooker, reporters Tyson and Gannett News Service colleague Louis Peck used an array of historic documents along with interviews of surviving principals to make their case.

The conclusion in a piece that was published on August 3, 1980, in the Gazette and other Gannett newspapers nationwide: “In an apparent attempt to escape legal and moral responsibility
Figure 9.1 “Love Canal: Public Health Time Bomb” shows the cover of a special report issued to the Governor and legislature of the state of New York in September 1978. It was released a month after the August 1978 announcement by Governor Hugh Carey that the state government would purchase all homes affected by chemical leachate from the toxic chemicals improperly disposed at the canal. A quote from Commissioner of Health Robert Whalen reads, “The profound and devastating effects of the Love Canal tragedy, in terms of human health and suffering and environmental damage, cannot and probably will never be fully measured” (pg. 1).

for the ongoing crisis at the Love Canal, the Hooker Chemical Co. has exaggerated the precautions it took to ensure that chemical wastes buried there more than 30 years ago would not harm nearby residents.”

The investigative effort by Tyson and Peck won them an Associated Press award in 1981. The series also was submitted for Pulitzer consideration. It was a finalist but did not receive an award.

For all journalists covering Love Canal, the obstacles were significant. When Love Canal was first reported by the Gazette in 1976, there was no precedent, no other comparison in the United States involving public exposure to buried chemical wastes. The only related public warning had come in 1962 when Rachel Carson wrote Silent Spring, which warned of health risks associated with pesticides.

In fact, even government agencies had trouble understanding the magnitude of the risk associated with these buried chemicals. At one public meeting in 1978, a Niagara County health official told residents worried about a black chemical ooze leaking into their basements that risk could be minimized by installing window fans.

“It was not a pleasant task to probe the matter,” former reporter Brown wrote in his book Laying Waste. Added Brown: “Those county and city officials to whom we trust our collective well being repeatedly downplayed the troubles and even subtly discouraged me from pursuing and reporting about them.”

Later, other reporters found additional roadblocks when Occidental Chemical began to aggressively resist efforts by reporters to report accusations of health risks being voiced by Love Canal residents and independent scientists.

Looking back, Time magazine said Love Canal was one of the worst environmental disasters of all time, right up there with Chernobyl and the Valdez oil spill. Former EPA official Beck agreed. “Quite simply, Love Canal is one of the most appalling environmental tragedies in American history,” he said (Beck, 1979).

The Love Canal disaster also prompted Congress to create “Superfund” – an industry funded effort to find and clean up other problem dumpsites nationwide. Pre-Superfund, the cleanup cost at Love Canal was estimated at $400 million. Both the state and federal government sued Occidental Chemical, which bought Hooker in 1968.

After the first families were evacuated, homes nearest the canal were demolished. Attempts were made to isolate the chemicals, covering the top with a thick layer of clay and building a leachate collection system around the perimeter to trap migrating wastes. Attempts were made to remove contaminated, dioxin-laden sediments from nearby streams, and neighborhood sewers were flushed to eliminate any chemical residues.

Since the homes outside the immediate area were spared, the city – worried about the stigma attached to Love Canal – pressed to revitalize the neighborhood. By 1990, with its name changed to Black Creek Village and the homes offered at dirt cheap prices, hundreds of families started to return to the area. Then some residents started getting sick. Though government agencies insisted that Hooker chemicals had been contained or removed, skepticism prevailed. Not surprisingly, current residents started to sue Occidental and the city. “The government has told people that the area is safe, and they should move in,” Attorney Tate Kunkle told the Buffalo News. “That may have been true at one time, but our evidence shows it is not safe there now” (Herbeck, 2018).

Ironically, the headline on a June 2018 Buffalo News story could easily have been written 40 years earlier. “Are Love Canal chemicals still making people sick?” the headline asked (Herbeck, 2018).

Through it all, Love Canal has tarnished the city’s reputation, made families ill, and awakened the nation to the dire consequences associated with careless waste disposal. Concluded former
EPA Regional Administrator Beck (1979): “It is a cruel irony that Love Canal was originally meant to be a dream community.”

References

