

The Tragedy of the Love Canal

by [Marisa Brook](#) ~ October 18th, 2006 at 3:08 am



William T. Love came to 1890s Niagara Falls, New York, with hugely ambitious plans. The landowner and entrepreneur envisioned the creation of an enormous utopian metropolis. His city would be home to enviable industry, and housing for more than a million people. Thousands of acres would become "the most extensive and beautiful [park] in the world". He planned to power the city using hydroelectric dams on a new 11-kilometer canal between the upper and lower Niagara Rivers. Within a year, however, Love's plans failed, and would quickly have been forgotten if it weren't for one problem. The one part of Love's city that had been built was a kilometer-long pit that would have been a part of the canal. After a few

decades had passed, this pit was purchased by the City of Niagara Falls, which had decided that it would make an ideal location for a needed chemical-dumping site. After the pit was filled with waste, a neighborhood was built directly on top of it. And, by the 1970s, the Love Canal became the site of one of the most appalling and worst environmental disasters in American history.

Back in 1892, it seemed inconceivable that Love's plans would fall apart so dramatically. He was a driven and charismatic man, who filled his brochures with wild promises and other hyperbole. The idea of a new city "among the greatest manufacturing cities in the United States" drew many supporters and investors; the following year saw construction begin on the canal. Then Love's ideas were quashed fairly quickly by a combination of factors. The fluctuations of the economy scared off the investors; the discovery of how electricity could be efficiently transmitted over long distances made Love's canal seem unnecessary; and local politicians prohibited the diversion of the rivers' water altogether. And, thus, Love's ambitions evaporated almost overnight.

The pit remained, filling with rainwater and becoming a local recreation area: swimming in the summer, skating in the winter. In 1920 the land was sold to nearby Niagara Falls, a growing industrial town that immediately started using the pit as a dumping ground for chemical wastes. This continued for more than twenty years, after which the Hooker Chemical and Plastics Corporation (now a part of Occidental Petroleum or OxyChem) purchased the land for their *own personal* chemical disposal. By 1953, the company had buried nearly 22,000 tons of waste, and the pit was virtually full.

At that time, the dangers of chemical wastes were almost entirely unknown. Far from being alarmed or even wary of living next to a major chemical producer, the city's residents were delighted at the medical and other developments that the chemical industry was bringing in. No one thought that the same companies could engage in any potentially dangerous activities. The Love Canal was lined with clay and covered with dirt to supposedly seal it, and Hooker Chemical's experts declared it safe. Only the occasional scientist recognized the dangers of chemical waste in the 1940s. One, a Dr. Robert Mobbs, had explored the link between insecticides and cancer; he would later strongly denounce Hooker Chemical as not just careless, but also well-aware of the potential for danger in its dumping ground.

It is not provable whether Hooker Chemical suspected the potential effects of its waste products. However, the fact that the company sold the Love Canal land for a *single dollar* is very suspicious. So is the carefully-worded disclaimer that Hooker included with the sale – stating that they were disclaiming any responsibility for any side-effects from chemical exposure??!!

Either way, these subtle warnings were not the red flag they should have been. The Niagara Falls Board of Education, which was in urgent need of more classroom space, eagerly purchased the land and began constructing a new elementary school. In 1955, four hundred children began attending the school, and about 100 homes were immediately built in the surrounding areas. Although most of the residents of Niagara Falls knew what the land had been previously used for, they were not cautioned about living on it.

Unsurprisingly, the direct effects of the pit's contents were soon felt. Strange odors and substances were reported by residents, especially those with basements. Pieces of phosphorus made their way to the surface; children in the schoolyard were burned by toxic waste. Local officials were alerted, but took no action.

In 1976, water from heavy rains and a record-breaking blizzard caused a significant amount of chemical waste to migrate to the surface, where it contaminated the entire neighborhood. In the following years the area was stricken with higher than normal rates of stillborn births and miscarriages, and many babies were born with birth defects. Informal studies at this time noted the frightening trend. One, by the Agency for Toxic Substances and Disease Registry, observed more than 400 types of chemicals in the air, water, and soil, with some of them - such as benzene - already known to be carcinogenic.



One particular family that was affected was that of local mother—Lois Gibbs. After reading about the history of the Love Canal in a local publication, she realized that her young son Michael had been constantly ill since starting at the new school. Gibbs asked for her son to be transferred; when this failed, she went from door to door in her neighborhood with a petition to close the school. The situation turned out to be even worse than she had thought; her rounds made it clear that the entire neighborhood was ill. Gibbs went on to lead the campaign to call attention to the neighborhood; she was joined by many other local parents as well as the editors of the *Niagara Falls Gazette*.



Finally, in the spring of 1978, state health commissioner Dr. Robert P. Whalen declared the area around the Love Canal hazardous. The school closed, the land was sectioned off, and more than 200 families in the immediate area were evacuated. By August of that year, the hazardous site was receiving national attention. On 7 August, President Jimmy Carter called upon the Federal Disaster Assistance Agency for its help. In September, Dr. Whalen released

an intensive report on the disaster, which read in part: *"The profound and devastating effects of the Love Canal tragedy, in terms of human health, suffering, and environmental damage, cannot, and probably will never be, fully measured. [W]e cannot undo the damage that has been wrought at Love Canal, but we can take appropriate preventive measures so that we are better able to anticipate and hopefully prevent future events of this kind."*

Lawsuits were quick to arrive, and Hooker Chemical found itself being sued for more than \$11 billion. The corporation denied its involvement through this series, even when faced by the Federal Justice Department in 1979 and New York State in 1989.

Still, a great deal of damage had been done, and eventually more than 1,000 families had to be moved out of the Love Canal area. An EPA study revealed that of the thirty-six people tested, eleven had chromosomal damage; and that of fifteen Love Canal babies born between January 1979 and January 1980, only two were healthy. Agencies at the state and federal levels spent hundreds of millions of dollars trying to clean up the pollution. Of that, Hooker Chemical has eventually been persuaded to contribute about \$130 million.

One good thing that came out of the disaster was the creation of the *Comprehensive Environmental Response, Compensation, and Liability Act*, more commonly known as the “**Superfund Law**”. Its aim is to collect taxes from gas and chemical corporations to be used directly to clean up any sites similar to the Love Canal. OxyChem now lists “*making chemical plants safer and more environmentally sound*” as one of its goals.



These are the types of houses in the area today. There is a sad irony in the fact that the site of William T. Love's “*most perfect city in existence*” became home to such a tragic disaster. In the last fifteen years, however, there has been some gradual resettlement of the Love Canal site. In the early 1990s parts of the area were declared safe again, and now make up a neighborhood known as Black Creek Village. The area was taken off the Superfund list in September 2004 at the announcement that certain clean-up goals had been reached. Much of the Canal itself, however, remains sectioned off by a chain-link fence, which to any local passersby must serve as a poignant reminder of the whole catastrophe.

More information:

[Wikipedia article](#)

[The state health commissioner's report to New York State, September 1978](#)

[EPA History article](#)

[The Legacy of Love Canal: A Case Study](#)

[Article by activist Lois Gibbs](#)

The Love Canal Tragedy

by Eckardt C. Beck [EPA Journal - January 1979]

If you get there before I do – Tell 'em I'm a comin' too – To see the things so wondrously true . . . At Love's new “Model City”

From a turn-of-the-century advertising jingle promoting the development of Love Canal (circa 1900)

“Give me Liberty. I've Already Got Death”

From a sign displayed by a Love Canal resident, 1978

Quite simply, Love Canal is one of the most appalling environmental tragedies in American history. But that's not the most disturbing fact. What is worse is that it cannot be regarded as an isolated event. It could happen again – anywhere in this country – unless we move expeditiously to prevent it.

It is a cruel irony that Love Canal was originally meant to be a dream community. That vision belonged to the man for whom the three-block tract of land on the eastern edge of Niagara Falls, New York, was named – William T. Love. Love felt that by digging a short canal between the upper and lower Niagara Rivers, power could be generated cheaply to fuel the industry and homes of his would-be model city. But

despite considerable backing, Love's project was unable to endure the one-two punch of fluctuations in the economy and Nikola Tesla's discovery of how to economically transmit electricity over great distances by means of an alternating current.

By 1910, the dream was shattered. All that was left to commemorate Love's hope was a partial ditch where construction of the canal had begun.

In the 1920s the seeds of a genuine nightmare were planted. The canal was turned into a municipal and industrial chemical dumpsite. Landfills can of course be an environmentally acceptable method of hazardous waste disposal, assuming they are properly sited, managed, and regulated. Love Canal will always remain a perfect historical example of how ***not to run*** such an operation.

In 1953, the Hooker Chemical Company, then the owners and operators of the property, covered the canal with earth and sold it to the city of Niagara Falls for ***one dollar***.

It was a bad buy and a terrible investment!

In the late '50s, about 100 homes and a school were built at the site. Perhaps it wasn't William T. Love's model city, but it was a solid, working-class community – for a while.

On the first day of August, 1978, the lead paragraph of a front-page story in the New York Times read:

NIAGARA FALLS, N.Y.—Twenty five years after the Hooker Chemical Company stopped using the Love Canal here as an industrial dump; 82 different compounds, 11 of them suspected carcinogens, have been percolating upward through the soil, their drum containers rotting and leaching their contents into the backyards and basements of 100 homes and a public school built on the banks of the canal.

In an article I prepared for the February 1978 *EPA Journal* – regarding chemical dumpsites in general – that *“even though some of these landfills have been closed down, they may stand like ticking time bombs.”* Just months later, Love Canal exploded. The explosion was triggered by a record amount of rainfall. Shortly thereafter, the leaching began.

I visited the canal area at that time. Corroding waste-disposal drums could be seen breaking up through the grounds of backyards. Trees and gardens were turning black and dying. One entire swimming pool had been had been popped up from its foundation, afloat now on a small sea of chemicals. Puddles of noxious substances were pointed out to me by the residents. Some of these puddles were in their yards, some were in their basements, and others were on the school grounds. Everywhere the air had a faint, choking smell. Children returned home from school and play with burns on their hands and faces.

Then there were the birth defects! The New York State Health Department is continuing an investigation into a disturbingly high rate of miscarriages, along with five birth-defect cases detected in the area.

I recall talking with the father of one of the children with birth defects. *"I heard someone from the press saying that there were only five cases of birth defects here,"* he told me. *"When you go back to your people at EPA, please don't use the phrase 'only five cases.' People must realize that this is a tiny community. Five birth defect cases here is terrifying!"*

A large percentage of people in Love Canal are also being closely observed because of detected high white-blood-cell counts, a possible precursor of leukemia.

When the citizens of Love Canal were finally evacuated from their homes and their neighborhood, pregnant women and infants were deliberately among the first to be taken out.

"We knew they put chemicals into the canal and filled it over," said one woman, a long-time resident of the Canal area, *"but we had no idea the chemicals would invade our homes. We're worried sick about the grandchildren and their children."* Two of this woman's four grandchildren have birth defects. The children were born and raised in the Love Canal community. A granddaughter was born deaf with a cleft palate, an extra row of teeth, and slight retardation. A grandson was born with an eye defect.

Of the chemicals which comprise the brew seeping through the ground and into homes at Love Canal, one of the most prevalent is benzene – a known human carcinogen, and one detected in high concentrations. But the residents characterize things more simply.

"I've got this slop everywhere," said another man who lives at Love Canal. His daughter also suffers from a congenital defect.

On August 7, New York Governor Hugh Carey announced to the residents of the Canal that the State Government would purchase the homes affected by chemicals. On that same day, President Carter approved emergency financial aid for the Love Canal area (the first emergency funds ever to be approved for something other than a "natural" disaster), and the U.S. Senate approved a "sense of Congress" amendment saying that Federal aid should be forthcoming to relieve the serious environmental disaster which had occurred.

By the month's end, 98 families had already been evacuated. Another 46 had found temporary housing. Soon after, all families would be gone from the most contaminated areas – a total of 221 families have moved or agreed to be moved.

State figures show more than 200 purchase offers for homes have been made, totaling nearly \$7 million.

A plan is being set in motion now to implement technical procedures designed to meet the seemingly impossible job of detoxifying the Canal area. The plan calls for a trench system to drain chemicals from the Canal. It is a difficult procedure, and we are keeping our fingers crossed that it will yield some degree of success.

I have been very pleased with the high degree of cooperation in this case among local, State, and Federal governments, and with the swiftness by which the Congress and the President have acted to make funds available.

But this is not really where the story ends – quite the contrary.

We suspect that there are *hundreds (perhaps thousands)* of such chemical dumpsites across this Nation. Unlike Love Canal, few are situated so close to human settlements. But without a doubt, many of these old dumpsites are time bombs with burning fuses – their contents slowly leaching out. And the next victim could be a main water supply, or a sensitive wetland, etc. The presence of various types of toxic substances in our environment has become increasingly widespread – a fact that President Carter called *“one of the grimmest discoveries of the modern era.”*

Chemical sales in the United States now exceed a mind-boggling \$112 billion per year, with as many as 70,000 chemical substances in commerce.

Love Canal can now be added to a growing list of environmental disasters involving toxics, ranging from industrial workers stricken by nervous disorders and cancers to the discovery of toxic materials in the milk of nursing mothers.

Through the national environmental program it administers, the Environmental Protection Agency is attempting to draw a chain of Congressional acts around the toxic waste problem. The *Clean Air and Water Acts*, the *Safe Drinking Water Act*, the *Pesticide Act*, the *Resource Conservation and Recovery Act*, the *Toxic Substances Control Act* – are all essential links.

Under the Resource Conservation and Recovery Act, EPA is making grants available to States to help them establish programs to assure the safe handling and disposal of hazardous wastes. As guidance for such programs, we are working to make sure that State inventories of industrial waste disposal sites include full assessments of any potential dangers created by these sites.

EPA recently proposed a system to ensure that the more than 35 million tons of hazardous wastes produced in the U.S. each year, including most chemical wastes, are disposed of safely. Hazardous wastes will be controlled from point of generation to their ultimate disposal, and dangerous practices now resulting in serious threats to health and environment will not be allowed.

Although we are taking these aggressive strides to make sure that hazardous waste is safely managed, there remains the question of liability regarding accidents occurring from wastes disposed of previously. This is a missing link. But, no doubt (hopefully) this question will be addressed effectively in the future.

In regards to the missing link of liability, if health-related dangers are detected, what are we, as a people, willing to spend to correct the situation? How much risk are we willing to accept? Who's going to pick up the tab?

One of the chief problems we are up against is that ownership of these sites frequently shifts over the years, making liability difficult to determine in cases of an accident. And no secure mechanisms are in effect for determining such liability.

It is within our power to exercise intelligent and effective controls designed to significantly cut such environmental risks. Tragedies, such as Love Canal (and there are others), unfortunately have now called upon us to decide on the overall level of commitment we desire for defusing future Love Canals. It is not to be forgotten that no one has paid more dearly already than the residents of Love Canal.

Edited by HS4U

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