



Online Ethics Center
FOR ENGINEERING AND SCIENCE

Love Canal - An Introduction

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Description

Extensive information about the first case concerning hazardous waste disposal and its possible health effects that received major national attention.

Body

What Is the Love Canal and Why is It Important?

Simply put, it is an incomplete canal, or just a trench, built in western New York state in the 1890s. From the 1930s through the 1950s, it was used as a chemical waste dump. The surrounding land was then sold and used for residential purposes, and soon people began complaining about strange odors and possible health problems. Since the late 1970s, many studies have been done to ascertain whether any health problems can be traced to the waste dumped into Love Canal.

It is significant because it was the first case concerning hazardous waste disposal and its possible health effects that received major national attention. The information in this site is drawn primarily from two publications: *Monitoring the Community for Exposure and Disease*, a report to the Agency for Toxic Substances and Disease Registry (Nicholas Ashford, Principal Investigator, and Linda Schierow,

Project Manager, Center for Technology, Policy and Industrial Development, 1991) and *Love Canal: Science, Politics, and People* (Adeline Gordon Levine, Toronto: D.C. Heath, 1982). Other information is drawn from materials listed in the other Love Canal Resources sections.

The Love Canal neighborhood is located in the city of Niagara Falls, in western New York state. It officially covers 36 square blocks in the southeastern corner of the city. Two bodies of water define the northern and southern boundaries of the neighborhood -- Bergholtz Creek to the north and the Niagara River one-quarter mile to the south. Open fields are to the east, and the western border is 92nd Street. The canal itself is enclosed by 97th, 99th, Colvin, and Frontier Streets.

The History

In the 1890s, William T. Love began digging a canal near Niagara Falls, New York. The canal was never finished -- leaving a seemingly useless hole in the ground. But when industries started flocking to the area in later years, this trench, Love Canal, was bound to find a use.

In the 1930s, four decades after William T. Love's project had faded away, various companies began dumping chemical waste into the canal. Hooker Chemical and Plastics Corporation purchased the land in 1942; through 1953, the company dumped an enormous quantity of hazardous waste (estimated at 352 million pounds) into the canal. Instead of finding a proper place for the wastes, Hooker merely filled in and covered the canal. The Niagara Falls Board of Education acquired the land and constructed a playground and elementary school there, selling the rest of the land to real estate developers. Throughout the next two decades, chemicals that had been dumped into Love Canal began to leach through the soil and leak into people's basements, contaminate underground pipes, and pollute the air. It was not until the 1970s, however, that the true potential for damage from such wastes was recognized.

Testing Begins

The first tests of the Love Canal area were begun by the New York Department of Environmental Conservation (NYDEC) in 1976. In 1977, results were disclosed: according to NYDEC and the Calspan Corporation (a private firm), groundwater was

contaminated, as was air and soil. Local citizens made this information available to their U.S. representatives, who called on the U.S. Environmental Protection Agency (USEPA) for further investigation. In March 1978, New York's health commissioner saw the USEPA report and decided that human testing would be necessary. Blood samples were drawn from Love Canal residents. A panel of physicians was assembled to evaluate the results of the tests, and they recommended drastic measures. As a result, the governor of New York declared a state health emergency. The elementary school on the Love Canal site was closed immediately and some families were relocated.

Citizens Organize

More studies were done in subsequent years. The only thing the tests had in common was that no matter how the results were interpreted, they always managed to be controversial. There continued to be a great deal of media coverage of Love Canal, and this, along with attention from Congress and the courts, only added to the controversy. To ensure that their concerns were properly represented, citizens began to organize the Love Canal Homeowners Association, the LaSalle Renters Association (representing a particular housing project), the 93rd Street Group (representing residents outside of the official study area), and the Concerned Area Residents Group.

Battles Continue in Court

Many recent developments in the Love Canal case have taken place in courtrooms. In June 1989, Hooker's parent company, Occidental Chemical Corporation, agreed to perform most of the necessary cleanup work (*U.S. v. Occidental Chemical Corp.*, WDNY, No. 79-990C, 6/1/89). Property damage and personal injury lawsuits have also been filed against the Occidental Chemical Corporation and its parent company, the Occidental Petroleum Corporation, and against the board of education, the city, and the county. In 1983, the New York Supreme Court announced a settlement in favor of past and present residents of Love Canal, (some 1,337 of them) for \$20 million. And in 1995, Occidental agreed to pay \$129 million to USEPA to cover cleanup costs. It has now settled all of the claims brought by Love Canal residents, as well.

Battles Continue in the Field

For years, city and state government tried to repopulate the Love Canal neighborhood, based upon USEPA data. In 1988 NYSDH produced a study suggesting that a majority of the neighborhood was satisfactory for people to live in. The study was lambasted by many, including scientists, ex-Love Canal residents, and environmental groups. But enough people apparently believed that the area was safe and a public agency, the Love Canal Revitalization Agency, took ownership of the homes and renovated them. Of the 239 homes in the area, now named Black Creek Village, almost all have been sold. The state health department has initiated a new study of the area's safety, the largest Love Canal study ever done. (*For more current developments at Love Canal, see [Recent Love Canal News](#).*)

Putting It All into Perspective

Love Canal was the first hazardous waste disposal case to draw national attention, and thus remains a landmark case. Congress drew on information from the Love Canal case when it debated and passed CERCLA, the Comprehensive Emergency Response, Compensation and Liability Act (known informally as the "Superfund" Act). The Love Canal court battles actually provided one of the first tests of the new law.

Further Online Ethics Center Resources about Love Canal

[A Timeline of Events at Love Canal](#)

[More Recent Love Canal News](#)

[Summary of Love Canal Health Studies](#)

["The Love Canal Disaster: An Error in Engineering or Public Policy?", a student essay by Joshua Hertz](#)

[Love Canal, Case Study 6 of "Ethics in the Science Classroom"](#)

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Links to Other Love Canal Web

Resources

(These will open in a new browser window.)

[University Archives Love Canal Collection](#)

The Library at the University at Buffalo provides a virtual exhibit recounting the chemical contamination of Love Canal and what has happened in the years since citizens were evacuated from the site.

[Love Canal: The Truth Seeps Out](#)

By Eric Zuesse. This 1981 article from *Reason Online*, defends Hooker Chemical and puts the primary blame on the Niagara Falls Board of Education.

Notes

This unit was originally created by Mark A. Zaremba for the OEC. Revisions were made in 2004 by OEC staff.

Resource Type

Case Study / Scenario

Authoring Institution

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