
“Love Canal” is now a household word and a symbol of the hazards of toxic waste disposal sites. The canal was originally excavated in the 1890's as part of an unsuccessful scheme to divert the Niagara River for hydroelectric power. Between 1942 and 1953, Hooker Chemical Corporation filled the canal with 21,800 tons of waste chemicals, then sold the site to the Niagara Falls school board for one dollar with a deed containing a provision that relieved Hooker of liability for personal injury or property damage resulting from the presence of wastes. A school was built on the site and a residential neighborhood grew up surrounding the canal. Meanwhile, the drums of chemicals gradually corroded and their contents leached outward from the canal through the soil. In the late 1970's, following several years of heavy rainfall, the presence of the chemicals became more apparent as sludge seeped into basements and emitted toxic fumes. In Love Canal: Science, Politics, and People, Adeline Gordon Levine, an associate professor of sociology at the State University of New York at Buffalo, provides an historical and sociological account of this man-made crisis, which eventually led to the relocation of more than 500 families under an emergency congressional appropriation of $20 million.

Levine chronicles the reluctant government response to what was at the time an atypical disaster1 of indefinite duration and uncertain extent, not covered by traditional emergency legislation. Her treatment of the bureaucracy’s role in the events at Love Canal, however, is mostly descriptive and lacks the depth of insight and analysis that she reserves for her portrayal of the angry reactions of local residents. Based on information collected in extensive interviews and through compilation of news accounts and the public record, Levine details the activities of the members of the Love Canal Homeowners Association, describing how they became organized, the awakening of their leaders, the development of their goals, and the steps they

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1. The potential for similar occurrences is revealed by estimates that there are more than 32,000 waste disposal sites nationwide and that at least 1,200 currently present serious health and environmental hazards. Hazardous Waste: EPA, Justice Invoke Emergency Authority, Common Law in Litigation Campaign Against Dump Sites, 10 ENVTL. L. REP. (ENVTL. L. INST.) 10,034 (1980).
took to achieve their objectives. This focus is at the same time the strength and weakness of the book. While Levine conveys a clear picture of why residents became disillusioned and frustrated with government officials, she gives little indication of the goals that motivated those officials. Levine explains that she could not get the information she needed to analyze the government's reactions to Love Canal (p. 4). Nevertheless, her unbalanced approach leaves the reader without an appreciation of how or why the citizen-initiated political forces affected the bureaucracy. Thus, the reader cannot evaluate whether the strategies employed by the residents of Love Canal will be effective in dealing with future hazardous waste disasters.

Levine also gives special attention to the role of scientists and scientific studies at Love Canal. She describes how the scientists conducted, communicated, interpreted and incorporated the studies into policy choices, and then demonstrates her thesis that science in this setting is social, that the scope of remedies available shapes the questions asked, and that the answers have profound consequences beyond any scientific meaning. A recurring theme is the intertwined effect of scientific uncertainty and the political importance of what little information was available on the extent of the contamination and the health effects on the residents. The timing and manner of the release of scientific studies became as important as their content. Results were repeatedly announced or leaked to the press before the individuals affected were notified, so that people received devastating news in an impersonal fashion, often without adequate explanation. The first order from the Health Department is typical. On August 2, 1978, the commissioner made an announcement in Albany, hundreds of miles from Love Canal, that the waste dump was a "great and imminent peril to the health of the general public residing at or near the site" (p. 7). He went on to recommend that pregnant women and children under two years of age who lived on the streets bordering the canal should temporarily relocate as soon as possible. There was no provision to pay for such an evacuation and no mention of why people living farther away were not included. The resulting fear and antagonism contributed greatly to the alienation of residents and officials and the deterioration of communication between them (p. 74). Residents became increasingly anxious to resolve the uncertainty of the risk to their health, while bureaucrats apparently wanted to avoid the hysteria following earlier announcements and to delay until they had firm data before taking action.

There has been much disagreement as to the validity of the scientific studies conducted at Love Canal and the extent of the health dangers to residents beyond the area immediately abutting the canal. A prestigious panel formed by the Governor of New York concluded that "there has been no demonstration of acute health effects linked
to exposure to hazardous wastes at the Love Canal Site. . . . Chronic effects of hazardous waste exposure . . . have neither been established or [sic] ruled out yet, in a scientifically rigorous manner.'" In response, Levine marshals the evidence for damaging effects as well as the considerable support that this data has received from the scientific community. A case can be made that the scientific certainty demanded by the panel is incompatible with some policy decisions, especially those concerning chronic exposure to chemicals with irreversible effects and unknown latency periods. By the time one is certain of the effect, it may have already occurred. In light of her extensive research, Levine could have considered how to counter the rigidity of scientific analysis with the flexibility of social and humanitarian considerations, and the appropriate role of scientific participation in public policymaking. Unfortunately, she sidesteps these broader issues and merely suggests that the blue-ribbon panel reached its conclusions because of conflicts of interest and political pressures (pp. 166-67).

Although Levine largely limited her analysis to a sociological examination of Love Canal residents, she has nonetheless produced a valuable case study. Many of the specific questions dealt with in her book, such as the habitability of the Canal neighborhood, remain unresolved, and government responses to the hazards from improper chemical disposal in other locations remain inadequate. The implementation of federal superfund legislation is still controversial and highly politicized. Even in more recent hazardous waste crises, such as the one at Times Beach, Missouri, government decisionmaking continues to ignore the valuable lessons that should have been learned from Love Canal and Levine's story.

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2. P. 158 (quoting letter from Lewis Thomas to The Honorable Hugh L. Carey and Members of the New York State Legislature (Oct. 8, 1980)).

3. For a similar criticism of Levine's coverage of the role that science should play in policymaking, see Williams, Chemical Debacle (Book Review), 85 TECH. REV. 85 (1982).


5. "It is . . . a story of the way institutions work, or fail to work, of bureaucratic inertia and buck-passing, and of scientific uncertainty in a realm where certainty always seems elusive." Reinhold, Missouri Dioxin Cleanup: A Decade of Little Action, N.Y. Times, Feb. 20, 1983, at 1, col. 2.