

TARGETING THE CARCINOGEN “BENZENE”

Benzene is an aromatic cyclic hydrocarbon with a continuous pi bond, and is a natural constituent of crude oil; it is also synthesized from other compounds present in petroleum. Benzenes use as an additive to gasoline was recently limited, since it is a proven carcinogen to humanity, however, benzene remains in use as an important industrial solvent and a precursor in many of today's drugs, plastics, explosives, pesticides, lubricants, napalm, dyes, and synthetic rubbers. When benzene contains a substituent, it is less harmful to mankind, in comparison to its original arene form.

In light of benzenes carcinogenic nature, and its ever-increasing use by manufacturers of consumer products, World Health Organization (WHO) and some specific Countries have established “Limit Standards” for its presence in our drinking water, throughout the world.

Love Canal, a neighborhood of Niagara Falls, located in northern New York, forever changed the public's attention and stirred a controversy about toxic wastes that continues even to today. Buried beneath the ground, in what was then considered an expedient and safe manner, were more than **21,000 TONS** of industrial waste containing more than **80 TOXINS**.

Area residents years later, were exposed to a multitude of these carcinogenic and debilitating hazardous wastes, when unprecedented rains, caused flooding of the entire neighborhood and surrounding areas.

The Hooker Chemical Company, the same company that had buried the wastes, and was intimidated to sell the property to the School District of the City of Niagara Board of Education, by means of assigning Eminent Domain constantly contended the schools construction and the development of the residential neighborhood. Hooker Chemical Company informed the School Board why they did not want to transfer ownership of the land.

“Hooker had evidently been so concerned that the Board understood what it was getting in taking over the Canal that the company had not left to chance whether School Board officials would physically inspect the property prior to acquiring it. Instead, Hooker had escorted them to the Canal site and in their presence made **EIGHT TEST BORINGS** into the protective clay cover that the company had laid over the Canal, and in to the surrounding area.

At two spots, directly over Hooker's wastes, chemicals were encountered four feet below the surface. At the other spots, to the sides the Canal proper, no chemicals showed up. So whether or not the School Board was of a mind to inspect the Canal, Hooker had gone out of its way to make sure that they DID inspect it and that they did see that *chemicals* lay buried in that Canal. Yet the subsequent behavior of the School Board would lead the casual observer to conclude that its member never knew that facts about the property they were acquiring."

Their repeated attempts to deter the construction of the school and the housing development surrounding it, was to no avail, the school board was adamant of their construction efforts.

"A resultant sewer pipe was laid 10 feet below the surface, on a gravel bed, and covered with gravel, providing a highly permeable violation of both Canal walls. Any loose and liquid chemicals buried in this part of the Canal could now escape, flowing along the gravel sewer-bed, throughout the neighborhood. To top this all off, a manhole was dug from the top of the Canal down through the fill to this sewer system 10 feet below the surface."

Controversy and local government cover-ups have been plied against the peoples of Niagara Falls and more specifically of Love Canal, its School, and surrounding residential housing areas.

TARGET CHEMICALS ADDRESSED IN EPA's STUDY

"Studies report that there were hundreds of unspecified chemicals, including 26 organic compounds, which were found in the basements of homes. Not all chemicals were selected for the Love Canal study. Of those selected, the following were reported to be present in significant concentrations.

Dioxins W/Significant Concentrations:

Dibenzofurans: It is not clear which of the following were present in significant quantities, but the general class of furans was present in quantities that far exceed the permissible levels.

Heptachlorodibenzo-p-furan

Hexachlorodibenzo-p-furan

Octachlorodibenzo-p-furan

Tetrachlorodibenzo-p-furan

Trichloroethylene

Tetrachloroethylene

Chloroform

Chlorotoluene

2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8 TCDD)

1,2-Dichlorobenzene

Tetrachlorobenzene

Chlorobenzene

Benzene (Known Carcinogen to Humanity)

Lindane (a chlorinated hydrocarbon pesticide more toxic than DDT)"