

Hyde Park: Dump of death

This Niagara dump contains the largest known deposit of cancer-causing dioxin TCDD, which may be leaching into Lake Ontario



Deadly site: Louie Paonessa points to the dump site near Lewiston, N.Y. that is about 100 yards from his business. The Hyde Park landfill contains 80,000 tons of toxic waste, four times the amount in the Love Canal where residents had to flee their homes.

By Peter Rickwood Toronto Star

NIAGARA FALLS, N.Y. — It's a 14-acre mound of dirt covered with grass and ringed by a frail chainlink fence. Redwing blackbirds sing beside young poplar trees.

Yet beneath the neatly mown grass of this tranquil area known as Hyde Park is a deadly dump of chemical wastes. And according to Canadian scientists and U.S. environmentalists, it is poised to destroy Lake Ontario.

Unless a tentative agreement — reached in secret between the dump's owners and the U.S. government — is overturned, experts say it's only a matter of time before the worst happens.

By conservative estimate, 80,000 tons of toxic waste has been dumped here, four times the amount in the notorious Love Canal where residents had to flee their homes that had been built on the site.

When Hooker Chemical and Plastics Corp. filled the Love Canal they shifted their operation to these former clay pits.

Together with another 214 waste chemical dumps in the area, Canada regards its menace with the same gravity as acid rain, says a spokesman for federal Environment Minister John Roberts.

It was the harnessing of the Niagara River and the availability of cheap hydro electricity that resulted in the development of the Niagara region as one of the world's major chemical centres.

Sophisticated chemicals

Breakthroughs in the 1930s in molecular chemistry allowed manufacturers to produce new and more sophisticated chemicals.

The legacy of that intense manufacture, which expanded rapidly during and after World War II, is the proliferation of dumps, most of them established haphazardly with little regard for the future.

But it's the Hyde Park dump, just a mile south of the Lewiston-Queenston International bridge, that is probably the most dangerous. Buried among the mirex, benzene, lindane, mercury and C-56, there is an estimated 2,000 pounds — the world's largest known deposit — of the dioxin TCDD, the most toxic industrial chemical ever manufactured.

If one shovelfull of the cancer-causing dioxin laden wastes entered the Niagara River, the damage to Lake Ontario could be irreversible, says Environment Canada senior adviser Douglas Hallett.

The dioxin is contained in 3,300 tons of trichlorophenol wastes, known as still bottoms, a by-product from the manufacture of the outlawed herbicide 2,4,5-T and the disinfectant hexachlorophene.

Dioxin accumulates in the fatty tissues of mammals. In laboratory experiments scientists have discovered that test animals fed the same amount of dioxin over a 20-month period as animals that received the

dosage over three months exhibited the same symptoms.

In a report last year, the Great Lakes Science Advisory Board of the International Joint Commission recommended that the dioxin TCDD should be totally absent from the environment.

Yesterday officials from Canada's department of external affairs met U.S. state department officials behind closed doors in Washington to express their concern.

Today the officials travel to Niagara to inspect the dumps. And at the same time in Buffalo there's expected to be a response to a Canadian-backed intervention in the U.S. district court that seeks to overthrow the tentative agreement for the future of Hyde Park.

Earlier this year, Hooker Chemical and Plastics Corp., owners of the dump, the U.S. Environmental Protection Agency (EPA) and New York state reached an out-of-court settlement for the clean up.

But Roberts in a letter sent in May says that the provisions of the settlement, which followed a prose-

cution by the EPA, "do not appear adequately to prevent the leaching of highly toxic chemicals in the Niagara River and Lake Ontario."

Ottawa is also alarmed because the settlement has been touted as the blueprint for the future of the other 214 chemical dumps along the Niagara frontier.

"Hyde Park provides for the most comprehensive and advanced remedial program ever undertaken and the settlement should serve as a model for industry," says EPA spokesman Robin Wood.

However, the tentative settlement for Hyde Park contains a fatal flaw, its critics claim.

Fissured bedrock

Nowhere in the plan, drawn up by Hooker's Canadian consultants Conestoga Rovers, is there a provision to prevent the chemicals from leaking into the fissured bedrock they've been dumped onto and entering the Niagara gorge.

"I am most concerned about these charges," U.S. District Judge John Curtin said last week after

Insight

they'd been lodged by Canadian and U.S. environmental groups.

The judge gave Hooker, the EPA and New York two weeks in which to explain their positions and establish whether their proposals will be effective.

The tentative settlement, calling for a minimum of \$5 million and a maximum \$10 million to be spent on the clean-up over 35 years, proposed building a ditch around the Hyde Park dump, capping it with clay and possibly drilling wells to collect underground run-off.

But nothing short of total removal and incineration of the contents of the dump will ever solve their menace, hydrogeologists for Canadian and U.S. groups claim.

Chemical contamination has already been found 50 feet below the rock surface 500 feet away from the dump. If the chemicals are not removed from the dump, run-off from them will have to be collected in deep wells for "thousands of years," says Canadian hydrogeologist Grant Anderson.

"We think they have missed the boat," Anderson says of the architects of the plan. "They have predicated the agreement on the assumption that the water is going through the soil. Using their data and accepted formulae we find that much more goes into the rock than the soil."

In fact there is no practical method to seal off the porous bedrock, says U.S. waste control expert Edward Kleppinger. Chemicals were dumped directly onto the bedrock and any of them that enter it will sooner or later end up in Lake Ontario, he says.

Buffalo attorney Barbara Morrison, representing a Niagara area group in the bid to tear up the proposed settlement, has a terse explanation for its intent:

'Written off to die'

"People have been written off to die," she says. "This area is in a state of complete economic decline. From all appearances and the lack of comprehensive strategy of the agencies mandated to protect the public it appears they are a national sacrifice."

"What Canadians have to understand too is that in these agreements being negotiated the state and federal government (of the U.S.) is signing away any future rights of redress."

There is no lack of funds, she said, to pay for the total clean up of the Hooker dumps. Hooker Chemical is owned by Occidental Petroleum, a giant California based corporation.

It has assets of \$6.6 billion and

with nearly \$12.5 billion in sales last year rose to 20th place from 21st in the so-called Fortune 500 list of prominent U.S. companies.

Ironically, the latest environmental storm to stir up Lake Ontario has hit it at a time when the lake's health is at its best for 10 years, says Environment Canada's Hallett.

In 1972, dioxin levels in the lake were so high that the reproductive abilities of herring gulls was reduced by 80 per cent.

The decline of dioxin in the lake, Hallett says, coincided with Hooker abandoning the manufacture of 2,4,5-T in 1974. Dioxin is a waste by-product of the herbicide.

Levels of dioxin

Nevertheless, dioxin and other cancer-causing chemicals are still entering the lake, presumably from dump sites like Hyde Park, said Hallett. And if the chemicals in them aren't removed there will continue to be a "sub chronic effect," increasing the risk of cancer and reproductive abilities in man.

Over the long term if the levels of dioxin in the lake increase, the effect from it would be the same as from acid rain, he said, preventing species from reproducing and driving others away.

His greatest fear is of a disaster, such as a hurricane, "shaking up" the site and carrying deadly wastes into the Niagara River in a flood.

Lake week Ontario's Environment Minister Keith Norton disclosed that provincial scientists have detected the dioxin TCDD in fish caught in Lake Ontario for the first time.

But Norton denied that the chemical was present at levels which are a health threat and the majority of fish sampled were free of contaminants. He said that analysis of drinking water from 75 points in the Great Lakes basin also failed to reveal the presence of dioxin.

However, although Ontario has purchased sophisticated new testing apparatus, it cannot detect dioxin below 10 parts per trillion in fish or one part per trillion in water.

Between the slabs of Vermont granite in his workshop, Louie 'Tombstones' Paonessa, owner of Niagara Monuments, can look out at the dump about 100 yards behind his business.

"I used to hunt rabbits, pheasant and deer in here before the war," he says. "Now I wouldn't want to eat them. I've not had any trouble from the dump, but you never know, you never know."



Water tests: The Ontario environment ministry monitors the quality of Lake Ontario, but its sophisticated equipment can't detect dioxin below one part per trillion in water.