

Chemical dump plan endangers lake -- Ottawa

By Peter Rickwood Toronto Star

The proposed clean-up of one of the world's deadliest chemical dumps puts the future of Lake Ontario in grave danger, a senior adviser to Environment Canada says.

Ottawa claims an agreement about to be ratified between the United States government and Hooker Chemicals and Plastic Corp., leaves Lake Ontario unprotected from the chemical dioxin TCDD — the deadliest chemical known to man.

Last week two anti-pollution groups, backed by Ottawa and a number of independent Canadian scientists presented affidavits to a U.S. district court judge in a bid to block the agreement.

The U.S. agreement calls for capping the dump and installation of drainage wells to provide for runoff of dangerous wastes. Canadian authorities say the measures are inadequate because U.S. studies on underground water runoff are faulty. Canada's position is that dioxin wastes should be treated like nuclear waste and permanently sealed in leakproof containers.

"Canada is spending a lot of money (on this court battle) but we cannot afford not to," said Rick Findlay, a senior contaminants officer with Environment Canada. "The implications for the lake are not good."

Court battle

The bid to block the agreement is being fought by the Canadian Environmental Law Association on behalf of Toronto's Pollution Probe and Operation Clean Niagara — a conservation group in Niagara-on-the-Lake.

In an out-of-court settlement earlier this year, the U.S. Environmental Protection Agency agreed that Hooker, owner of the Hyde Park dump in Niagara Falls, N.Y., should spend a minimum of \$5 million and a maximum of \$10 million over a 35-year period to control its dump.

The Hyde Park dump — a sprawling 14-acre site beside Bloody Run Creek on the edge of the Niagara River gorge — contains 80,000 tons of chemical wastes. It is among 200 dumps in the area — one of the United States' major chemical manufacturing regions.

But the Hyde Park dump is the deadliest because it contains the world's largest deposit of trichlorophenol wastes — commonly known as still bottoms — left over from the manufacture of the banned 2-4-5 herbicide.

Other poisons

The still bottoms contain an estimated 2,000 pounds of the dioxin TCDD. Other poisons in the dump include mirex, benzene, lindane and mercury.

Scientists warn that if just one shovelful — three pounds of the 3,300 tons there — of lethal wastes containing TCDD enters the lake, the effect on the ecology would be devastating.

No one knows for sure what the effect of the same amount of the cancer-causing and genetically destructive chemical would have on the six million people who get their drinking water from the lake.

Canadian scientists claim the only safe solution for the dump is the removal of the 80,000 tons of waste and the incineration at high temperatures of the dioxin.

Controlled 'forever'

The dump must be controlled "forever," Douglas Hallett, a senior adviser in Environment Canada, said in his affidavit to the court.

So dangerous are the chemicals in the dump that they should be treated like radioactive wastes, which have to be contained in leakproof containers capable of withstanding erosion and earthquakes for at least 1,000 years, Hallett said.

The control measures would consist of capping the dump and surrounding creeks and waterways, installing a tile drain around the site and drilling 11 wells into the bedrock the chemicals sit on to collect underground seepage.

But nowhere in Hooker's proposed remedial action is there any indication of an understanding of the water movement in the geology of the area, hydrogeologist Grant Anderson, said in his report to the court.

Short-term solution

Capping is only a short-term solution that won't prevent contaminants from being released into the Niagara River, his report claims. And if wells are to be used to collect underground seepage — known as leachate — it makes more sense to leave the dump uncapped in order to wash out contaminants, the report adds. Capping the dump would also remove the need for the tile drain, the only firm requirement in the tentative agreement, Anderson claims. But the proposed drain will not prevent the flow of chemicals into the bedrock.

The bedrock beneath the dump is a highly permeable and fissured formation that allows water to move quickly and freely through it, Anderson's report says.

It has been proposed that 11 wells be drilled at the west end of the dump. But that indicates a wrong assumption about the direction of flow of ground water beneath the site, Anderson claims.

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