

August 8, 1994

Wilcox Dock, Cumberland Bay Hazardous Waste Site

Fact Sheet

The New York State Department of Environmental Conservation (NYSDEC) has confirmed the presence of polychlorinated biphenyls (PCB), chlorinated dibenzo-p-dioxin, and chlorinated dibenzofuran compounds at elevated levels in the accumulated sludge materials located within the northwestern portion of Cumberland Bay in Lake Champlain near Plattsburgh, New York. The presence of these compounds in the sludge material was initially reported in a study conducted under the Lake Champlain Sediment Toxics Assessment Program in 1992. Sludge material were collected at several locations in the vicinity of Wilcox Dock in June of 1993 and March of 1994 as part of a more detailed PCB contamination study within Cumberland Bay by the Department.

The levels of PCB contamination detected in the Department samples ranged from non-detect up to 1850 ppm (parts per million). The concentration of PCBs exceed the 50ppm threshold for hazardous waste at many sampling locations and depths within the sludge material with the value of the homogenized core samples being 87 ppm. As a result, the contaminated portions of Cumberland Bay are being considered for addition to the New York State Registry of Inactive Hazardous Waste Sites as a Class 2 site. The dioxin and furan levels detected in the limited number of NYSDEC samples analyzed for these compounds are considerably higher than background levels in natural sediments. Further analysis is needed to determine the origin and environmental significance of the dioxin and furan compounds detected within the sludge materials.

The extent of the contamination identified to date is primarily confined to the accumulated sludge materials within the area extending from the western shore of Cumberland Bay north of the breakwater extension located south-southeast of Wilcox Dock, and out along an imaginary boundary running north-south from the northeastern corner of the aforementioned breakwater extension, to a point along the northern shore of Cumberland Bay approximately 200 feet west of the mouth of Scotion Creek (Dead Creek). Portions of the sludge bed are sometimes exposed along the shore above the mean water level, but most portions are always

submerged under two to five feet of water. The sludge bed is composed of the accumulated effluents from several past industries including sawmills, wood chip producing facilities, but paper manufacturing/processing facilities were the principal contributors.

The preliminary analysis of the dioxin and furan compounds detected in the NYSDEC samples of the sludge material is inconclusive, but suggests that much of this contamination is primarily attributable to combustion sources. Additional investigations are planned to better evaluate the nature of this dioxin and furan contamination.

The NYSDEC's Divisions of Hazardous Waste Remediation, Water, and Fish and Wildlife are cooperatively planning to continue an investigation to delineate the geographic extent of the PCB, dioxin, furan, and other contamination within Cumberland Bay; identify the existing and potential environmental impacts of the known contamination; and identify the probable source or sources of that contamination.

In addition to the NYSDEC studies, the New York State Department of Health is investigating the potential for human exposure to the contaminated sludge materials on the lake bottom and along the shoreline; investigating the potential for direct human exposure through the use of the lake as drinking water source along the Cumberland Head portion of Cumberland Bay; evaluating the need to limit such potential human exposure; and devising strategies for limiting that exposure; and, assisted by the Division of Fish and Wildlife, evaluating the need to expand the fishing-related health advisories that currently exist for American eel and brown bullhead within Cumberland Bay to other species.