

DRAFT COPY OF GIDLAB COMMENTS ON
PCB RIVER CLEANUP OPTIONS

Site: <u>New Bedford</u>
Depth: <u>4.6</u>
Other: <u>222618</u>

PROPOSED BY EPA

A. Rechannel Upper River, Contain and Cap

Technically feasible, low-hazard operation, environmentally safe, cost estimate reasonable.

B. Dredge Upper River, Contain in Perimeter Lined Structure and Cap

Technically feasible, fairly low hazard operation, environmentally safe, cost estimate reasonable.

Notes: Containment should be in river bed along west shoreline to avoid major transport of the most highly toxic hotspots, and to minimize contaminated sediment resuspension. After adequate compaction and capping, usable land, as for playgrounds, could be created. Bottom lining not needed as PCB and heavy metals will not leach through existing river bottom silt and debris.

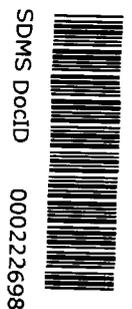
C. Dredging Upper River, Contain in a Bathtub Structure and Cap

Technically feasible but more difficult than A or B preceding. Fairly low hazard if disposal site is along western shore (see notes on Option "B"), environmentally safe. Cost estimate underestimated—special base preparation to insure liner integrity, extra drainage and bottom liner cost would probably increase figure by \$14 million at least.

D. Dredging, Transfer to Trucks, Trucking to Offsite Out-of-State Disposal Sites and Containment

Technically feasible but more difficult than A, B, or C above. Highest operational hazard: transfer from dredging to trucks, high traffic volume of hazardous material over congested New Bedford area streets and through critical environmental areas, danger of spills and accidents in transit, sediment containing over 500 ppm of PCB, plus mercury and metals not acceptable in any existing hazardous waste in disposal sites in the United States, special drum encapsulation of most contaminated sediments might be required in trucking operation and for final disposal; disposal site operators would require a disposal fee of \$30 to \$300 a ton or more (depending on the toxicity hazard) for handling, space utilization, disaster insurance and continuing monitoring costs.

Cost estimate of \$44 million for dredging, transport and disposal costs is ridiculously low. Probable cost \$400 to \$600 million (depending on site location).



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E. No Action

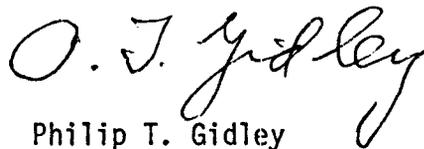
Technically feasible, but continuing hazard to fish, lobsters and molluscs. Not environmentally safe for swimmers, fishermen or children along the river. Continuing high economic losses to lobstermen, shell-fishing and widespread biological stress (including morbidity) to fish.

Note: Dredging method should be preferably hydraulic with operating limitations on duration, tide, wind and rate conditions. The Japanese dredging system which combines vacuum suction and air compression (or similar European dredge) should be used to minimize sediment resuspension and turbidity. The preposterous U.S. prohibition on the use of foreign-manufactured dredge equipment should be waived by Congress.

August 17, 1984

Revised August 21, 1984

GIDLAB: PCB 604



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APPENDIX A
GIDLAB PCB-604

ADDITIONAL COMMENTS AND QUESTIONS
ON PCB EPA NUS RAMP

1. Check and explain discrepancies of PCB values (several orders of magnitude between Western and NUS maps (above Coggeshall Bridge).
2. In the Channel System, where does the surface water run-off (of drainage basin) go?
3. Where and what effect of incoming tides entering north of Coggeshall Bridge at lowered channel ends?
4. Consider maintaining Channel height to Coggeshall Bridge and installing tide gates. Also consider auxilliary (higher) tide gates for surface water run-off (separately).
5. Consider and evaluate cost and feasibility of removing very contaminated pocket on Fairhaven Shore just south of Coggeshall Street Bridge (embayment with many small boats, known as "The Navy Yard.") This section is a play area for children, boaters and fishing. The entire area could be moved north (to containment areas) via hydraulic dredge.

September 10, 1984

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Note: Estimate Clamshell dredging at up to 90% solids and hydraulic dredging 8-12% solids.