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CLIPPED BY BACONS

STRIPED BASS TAKEN FROM THE HUDSON RIVER AND SALMON FROM LAKE ONTARIO are contaminated with dangerously high levels of the toxic chemical PCB, polychlorinated biphenyl. In issuing a warning about their consumption, New York State environmental and health officials announced that fish caught in the Hudson 100 miles downriver and just upriver of two General Electric plants, which discharge the compound, contained amounts of the chemical far exceeding the Federal allowable standards of 5 parts per million. Additionally implicated are rock bass and shiner minnows, but fears are that large-mouth and small-mouth bass, yellow perch, white perch and white catfish are similarly affected. Sturgeon and shad may have escaped the heavy concentrations of PCB but indications are that since the Hudson serves as a major spawning ground for various species, fish caught in other Northeast waters may present a danger if eaten.

PCB, a chlorinated hydrocarbon, used in the manufacture of capacitors and transformers, is a chemical "cousin" to DDT in that it is readily soluble in fats. Large doses of the compound found in rice oil sold in Japan in 1968 caused skin disease in some 1,000 persons, and was the attributable cause of death in 18 others, including two stillbirths of nine pregnant women studied. Its full actions on humans is unknown, but laboratory animals show changes in skin pigmentation and liver damage. Massive reproductive failures have been reported in rhesus monkeys with limits set at the Federal safety level. Despite health warnings, and limitations on its use since 1970, G.E. has been dumping 48 pounds of PCB into the river at Hudson Falls and Fort Edward each day until this year, when it reduced the daily discharge to less than two pounds. "We don't put PCB's into the river intentionally," said Robert Paul of the company's Fort Edward plant. "But we live in a real world, and it is going to take time to solve the problem."

Disclosure that G.E. buried unuseable capacitors in landfill sites away from water may yet extend the health hazard far beyond the contamination of fish. "That's absurd," said David Seymour, president of the River's Fishermen's Association. "Has anybody at G.E. asked what happens when it rains at a garbage dump? If any of the containers holding PCB are broken, the stuff will leach into the ground and may contaminate water for miles around." The state is currently monitoring drinking water supplies at various points. Levels of chlorinated hydrocarbons at Poughkeepsie, which uses the Hudson as a source of drinking water, were found in recent months to be well below those required for safety.

The Environmental Protection Agency cannot bring its federal authority to bear on the use of PCB and chemicals like it until Congress provides the legislative muscle in a Toxic Substances Control Act, still being debated after four and a half years. A National Research Council report recently defined the key issues of the discretionary powers the EPA would have over chemical substances if legislation is passed. It recommends that laws reflect the principle that "the burden of proof that society will obtain a benefit should rest with those proposing a new use of a chemical." The 330-page study states that since a producer of a new chemical plans to benefit from it is "the one with the resources to analyze its unfavorable as well as favorable consequences." The "application of this general principle" is "clear for new chemicals", but the NRC study finds the government regulation of chemicals already in use "less clear"; once a challenged chemical is proved to create "an excessive hazard to human health or the environment, the burden of producing evidence should shift to the proponent of use."

The main thrust of the recommendations is toward better data to aid the decision-making process, but the study cautions: "A characteristic of most decisions to regulate chemicals is that the full consequences of the decision are impossible to predict with any certainty at the time the decision is made." Value judgments and political decisions should follow from a maximum of data because, it concludes: "The primary value that the regulation of chemicals attempts to satisfy is protection of human safety. But even if all other values were sacrificed to it, absolute saftey would not be an achievable goal."

"Clear" or "less clear" and "absolute safety" clauses notwithstanding, it seems imperative that recent events involving chemicals that adversely affect the health and safety of consumer and producer alike demand the hastening of toxic substances control legislation. Someone has to finally say: "The buck stops here!" --Irene Atney Yurdin--

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THE ENVIRONMENTAL PROTECTION AGENCY HAS OBLIGATED $3.6 BILLION for construction of municipal sewage treatment facilities during 1975 fiscal year, topping the Agency's goal by some $200 million. Obligations of the federally authorized $18 billion to be granted for water cleanup by the end of fiscal 1977 totals almost $6.6 billion as of June 30, 1975, with a monthly average of $600 million committed during the March-to-June period. During the last quarter, obligations exceeded the $2.2 billion quota by $214 million.

A breakdown of the number of grants issued during fiscal 1975 reveals: 1,639 Step 1 grants worth $92 million; 268 Step 2 grants worth $79 million; and, 644 Step 3 grants worth almost $2.9 billion. (Because dollar amounts do not reflect increases or decreases after the initial award, the totalled figures do not add up to the year's true obligations.) Agency goals for obligating the remaining $11.4 billion are set at $5.6 billion for 1976 fiscal year, and $5.9 billion for the fiscal year ending in 1977.

ONTARIO'S PHOSPHORUS REMOVAL PROGRAM RATES HIGH MARKS in improving water quality. The effectiveness of the program, initiated in late 1971 with the installation of equipment in Gravenhurst Bay, Lake Muskoka, has resulted in the best water clarity and lowest phosphorus concentrations for any month of May or June on record.

Studies of the water quality of the Bay from 1969 to 1971 had disclosed that some 92 percent of the phosphorus entering the Bay came from the effluent discharged by the pollution control plant serving two-thirds of Gravenhurst. Removal equipment reduced the phosphorus content of plant effluent by nearly 90 percent. Surface water concentrations of phosphorus have dropped an average of one-third, from 43 micrograms per liter to 30, suspended algae has been halved, and water clarity has improved. Dense algae bloom, once a common occurrence, has rarely been seen since the program took effect. "These findings are strong support for Ontario's phosphorus removal program which was initiated at a time when there was still considerable controversy over the likely benefits," noted Environment Minister William G. Newman. The successful program is being expanded to include, by the end of this year, phosphorus removal facilities at more than 200 of the province's municipal treatment plants serving some 4.7 million people.

Copies of "Phosphorus Removal & Water Quality Improvements in Gravenhurst Bay, Ontario," may be obtained from the Limnology and Toxicity Section, Water Resources Board, Ontario Ministry of the Environment, Box 213, Rexdale, Ontario M9W 5L1.

THICKENED SEWAGE SLUDGE IN THE NEW YORK CITY AREA is still looking for a home away from water. A "pollution-free" alternative to ocean dumping that involves chemical conditioning with lime and ferric chloride, dewatering with filter presses to reduce the sludge to a minimum of 40 percent solids and pyrolyzing the sludge cake to produce gases and char has been rejected by the Environmental Protection Agency. The pyrolysis plan offers, of all alternatives reviewed, the least potential negative environmental impact on water, air, and land resources at lowest overall cost but, could not become operational until 1985, four years after the Agency commitment date of 1981, and it "places all the eggs [alternatives] in one basket."

The report, prepared by the Boston consulting firm of Camp Dresser & McKee, and Alexander Potter Associates, New York, for the Interstate Sanitation Commission, a regional pollution control agency, estimates the cost of facilities, including land and engineering, handling 2,000 tons of dry solids sludge in several different plants at $400-$500 million (in 1975 dollars). Plants designed for capacities larger than 100 tons per day would cost some $200,000-$250,000 per ton. Alternatives are still under investigation.

Current method of disposal of five hundred dry tons of sewage generated daily, or 80 percent of sludge produced in the New York-New Jersey metropolitan area, is barged out for disposal in the New York Bight, 12 miles offshore.