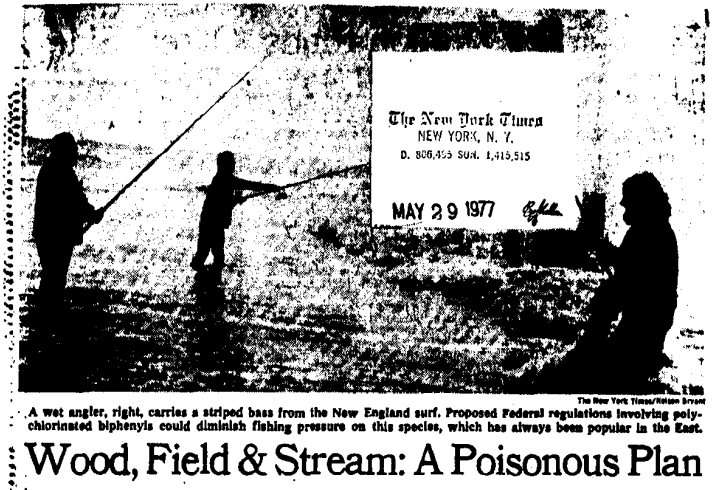

The New York Times/Nelson Bryant

A wet angler, right, carries a striped bass from the New England surf. Proposed Federal regulations involving polychlorinated biphenyls could diminish fishing pressure on this species, which has always been popular in the East.

Wood, Field & Stream: A Poisonous Plan

By NELSON BRYANT

The proposed Federal regulations that would lower the tolerances of polychlorinated biphenyls (P.C.B.'s) permitted in foods involved in interstate commerce would clearly hurt the commercial fishing industry.

The Food and Drug Administration has recommended lowering the present Federal P.C.B. tolerances in certain foods, including milk fat, meat, eggs and fish, from 5 parts per million (ppm) to 2 ppm.

The proposals were published in the Federal Register on April 1, and the deadline for comment on them is this Tuesday. P.C.B.'s are a fire-resistant liquid used mainly as insulating fluids in electrical equipment, including transformers and capacitors. Among the effects of P.C.B.'s on humans are skin discoloration, swelling of the eyes, liver disease, retarded infant growth and even fatal death. In high concentrations — much higher than those known to affect humans adversely—P.C.B.'s may adversely affect fish reproduction.

Testing fish or meat for P.C.B.'s is a complicated process involving gas chromatography. Each sample involves about five men hours. The cost of testing each sample is estimated at from $100 to $125 and the procedure takes five days to complete. New York State appears to be the leader, at least on the East Coast, in P.C.B. testing, and it has found high concentrations of P.C.B.'s in various fishes in some of its lakes, streams and marine waters.

In the Hudson River, P.C.B. tests of 107 striped bass revealed an average of a little over 5 parts per million (ppm) and 85 Long Island Sound striped bass averaged 3.45 ppm. Long Island Sound bluefish, 51 of them, averaged 2.57 ppm.

The contamination of bluefish seems rather surprising, for they spend a good part of their lives in the open ocean, presumably far from the P.C.B.-using manufacturing plants. But young bluefish, or snappers, which are spawned in the ocean, move inshore to nursery areas to feed and grow, and the bluefish is also a wanderer, moving all the way along the coast from Maine to Florida. Although the Hudson is a source of P.C.B. contamination, there are other regions along the East Coast similarly defiled.

High Tides Around New York

DAYLIGHT SAVING TIME

	Sandy Hook Rockaway Inlet		Willets Point		Inkwood Cove		Pine Island Inlet		Montauk Point		Race Lawrence	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
May 29	6:01	6:44	6:29	6:57	7:18	7:46	6:51	7:17	5:36	6:01	6:09	7:14
May 30	6:51	7:34	7:19	7:53	8:08	8:36	7:41	8:06	6:26	6:53	7:02	8:07
May 31	7:39	8:22	8:07	8:41	8:56	9:24	8:29	8:57	7:16	7:43	7:57	9:03
June 1	8:28	9:12	8:57	9:31	9:46	10:14	9:19	9:47	8:07	8:34	8:52	9:58
June 2	9:18	10:03	9:48	10:22	10:37	11:05	10:10	10:38	8:59	9:26	9:48	10:54
June 3	10:10	10:57	10:41	11:15	11:29	11:57	11:02	11:30	9:53	10:21	10:45	11:50
	For high tides at Asbury Park and Belmar, deduct 36 min. from Sandy Hook time.											
	For high tides at Atlantic City (Steel Pier), deduct 24 min. from Sandy Hook time.											
	For high tides at Jones Inlet (W. Lookout), deduct 19 min. from Sandy Hook time.											

Only fish tend to concentrate P.C.B.'s in their bodies, and the common American eel, a catadromous fish that spends most of its life in fresh water, is a notable example of this. Hudson River eels should not be eaten.

P.C.B.'s may be taken in by fish through their gills and through the food chain, and certain bottom-feeding fish also gather up large quantities of P.C.B.-laden sediment.

It is somewhat ironic, but the anadromous striped bass, which some people feel is in danger of being overfished, may benefit from the new regulation if it becomes law. Last year 3,450,000 pounds of striped bass were handled by the Fulton Fish Market, which represents about 80 percent of the total East Coast landings of the species. Most of those fish were involved in interstate commerce, being trucked in from as far away as Georgia and Massachusetts.

The proposed new Federal regulation would not, of course, affect intrastate sales, although Connecticut, which does not permit the sale of stripers caught in its waters, could have a problem.

Connecticut has done some P.C.B. testing of fish. Of 19 striped bass examined last year, only five were above 2 ppm and only one of those was above 5 ppm. The size of striped bass being tested is critical. A 50-pound striper could be nearly 20 years old. The older the fish, the more chance it has to accmulate P.C.B.'s.

Commercial fishermen—and sportfishermen—who sell their catch locally or within a state could continue to do this under the proposed new regulations. Nor would the regulations affect sportfishing itself, except to the extent that it would tend to dissuade people from eating such species as stripers and bluefish.

Presently New York State is recommending that one eat striped bass from the Hudson River only once a week and that pregnant women and children under 12 refrain from stripers altogether.

The Monsanto Chemical Company of St. Louis is the sole United States manufacturer of P.C.B.'s. In 1972 Monsanto announced it would produce P.C.B.'s only for use in closed-circuit systems where they could not readily enter the environment. (P.C.B.'s had been used in the production of many things, including paint and so-called "carbonless" carbon paper.) Monsanto also said it would suspend production of P.C.B.'s when a suitable substitute was found. The ideal substitute has not been found, but Monsanto is voluntarily avoiding all production of P.C.B.'s in October.

Some P.C.B.'s are still being imported into this country for use in closed-circuit systems, but under the Toxic Substances Control Act, which became effective in January of 1971, it will be illegal in the United States to "process or distribute" P.C.B.'s by June of 1979. The same act also bans United States production of the substance, effective Jan. 1, 1979.

P.C.B. compounds—there are more than 200 varieties of them—may be expected to retain their essential toxicity in the environment for 15 to 75 years.

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