



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Anthony S. Earl
Secretary

BOX 7921
MADISON, WISCONSIN 53707

IN REPLY REFER TO: 4530

May 12, 1978

Tecumseh Products Company; and
City of Sheboygan Falls

Order Number 2A-78-1190

FINDINGS OF FACT

THE DEPARTMENT FINDS:

1. That the Diecast Division of Tecumseh Products Company, 415 Cleveland Street, Sheboygan Falls, Wisconsin operates an aluminum diecasting plant located in the NW 1/4 of the SE 1/4, Section 36, T15N, R22E, Sheboygan County, Wisconsin.
2. That a dike is located between the diecasting plant and the Sheboygan River.
3. That on information and belief the dike is owned by Tecumseh Products Company and is maintained by Tecumseh Products Company and/or the the City of Sheboygan Falls.
4. That the dike and the property between the dike and the diecasting plant are within the floodplain of the Sheboygan River.
5. That solid waste materials have been deposited on the dike and in areas directly adjacent to the plant on property owned by Tecumseh Products Company.
6. That these solid waste materials contain significant concentrations of polychlorinated biphenols.
7. That concentrations of polychlorinated biphenols have been found in fish in the Sheboygan River, well in excess of United States Food and Drug Administration tolerance levels.
8. That because of these significant concentrations of polychlorinated biphenols in fish tissue, the Department of Natural Resources in conjunction with the Department of Health and Social Services has advised consumers not to eat fish taken from the Sheboygan River until further notice.

SUMMARY OF EVENTS LEADING TO AND
FOLLOWING THE DISCOVERY OF HIGH LEVELS OF
PCB IN SHEBOYGAN RIVER FISH

1. On September 9, 1977 fish samples were collected in the Sheboygan River at Kiwanis Park, in the City of Sheboygan. This location is one of the 29 stations which comprise Wisconsin's share of the New National Water Quality Monitoring Network. Water samples are taken from the 29 stations each month and fish are collected annually for contaminant analysis.
2. In March of 1978 the fish samples were analyzed by Department chemists at the Laboratory of Hygiene. The test results were as follows:

Species & Length	PPM PCB	Percent Fat
5 Carp (12-23")	750	24
5 Northern Pike (18-25")	55	3.7
5 White Sucker (10-14.5")	26	3.4

Because these levels were well in excess of the U.S. Food and Drug Administration tolerance level of 5 PPM (for fish sold in Interstate Commerce), we requested that the location be sampled again and the high test values confirmed.

3. On March 31, 1978 fish samples were again collected from the Sheboygan River at Kiwanis Park. The test results were reported by the laboratory on April 18, 1978 as follows:

Species & Length	PPM PCB	Percent Fat
17 Black Bullheads (3.5-9")	41.8	.7
12 Black Bullheads (4-9")	34.3	5.2
1 Rock Bass (8")	10.0	1.9
2 Common Shiners (4")	49.8	2.3
1 Coho Salmon (23")	8.3	.5
2 Walleye (17")	241.5	8.9
3 Carp (10-18.5")	180.0	5.4
4 Carp (23-24")	158.4	8.7
5 Suckers (12-21")	30.0	5.4
4 Northern Pike (21-27")	62.6	4.0

The test results confirmed the high PCB levels in fish at this location. The values ranged from 8.3 PPM for a Coho Salmon which may have just entered the river to over 150 PPM for carp which probably live in the lower river most of the year.

4. On April 20, 1978 a telephone conference call was held between the Central Office, the Southeast District Office and the Plymouth Office to discuss the situation. Following the conference call, the data was reviewed with the Department of Health and Social Services and a joint press release was prepared and mailed announcing the findings and recommending that the public not eat fish caught in the following waters until further notice:

Sheboygan River - from the Sheboygan Marsh Dam to the Coast Guard Station in Sheboygan.

Mullet River - from the lower mill pond dam, Plymouth, to the junction with the Sheboygan River.

Onion River - from the Waldo mill pond dam to the junction with the Sheboygan River.

Signs providing this information were posted on the rivers on April 21, 1978.

5. We are conducting an extensive search for sources of PCBs in the Sheboygan River. Sewage treatment plant and industrial effluents have been sampled. More fish have been collected and will soon be tested. We are waiting for the river levels to fall before sampling river water and river sediments. We should complete this investigation in 6 to 12 weeks. When this work is completed a full report will be presented.
6. The Department has conducted various fish testing programs since 1966. We have investigated levels of contaminants in fish including DDT, dieldrin, PCBs, mercury and other toxic metals. The major purpose of these programs was to identify pollution problems and to determine locations in Wisconsin where fish exceed U.S. Food and Drug Administration Standards for contaminants. The Department provides its testing data to the State Department of Health and Social Services for review. The current Health and Social Services advisory on fish consumption is printed in the fishing regulations pamphlet which is given to sport fishermen at the time the fishing license is purchased.

We have not extensively checked fish in all river systems to date. Such an accelerated program would demand additional personnel and equipment beyond our present budget appropriations. Currently we have approximately 150 fish samples from 1977 awaiting analysis and have scheduled 347 fish samples for collection in 1978. In addition, we are currently testing many fish from the Sheboygan River at this time.

Report made at the
April ¹⁹⁷⁸ Natural Resources
Board Meeting by S.J. Kleimant