



Ontario

RECEIVED APR 0/6 1982

Ministry
of the
Environment

Ontario Government Building
119 King Street West
12th Floor
Box 2112
Hamilton, Ontario L8N 3Z9
Telephone (416) 521-7640

April 1, 1982

Toby Vigod
Barrister & Solicitor
Canadian Environmental Law Assoc.
8 York Street
Toronto, Ontario
M5J 1R2

Dear Ms Vigod:

RE: New Evidence of Chemical Contamination in Fish

The Minister of the Environment, the Honourable Keith Norton, announced the findings of two recent fish testing programs in a Statement to the Legislature today. Many of the samples tested were taken from the Niagara River.

I am enclosing a copy of the Minister's Statement and the associated news release.

Yours very truly,

G. H. Mills
Director
West Central Region

ENCL.



FOR RELEASE
2:00 p.m. April 1, 1982

Ministry
of the
Environment

FOR FURTHER INFORMATION
J. Ralston (416) 965-6954
A. Johnson (416) 965-6954
J. Hornick (416) 965-7117

NEW EVIDENCE OF CHEMICAL CONTAMINATION IN FISH

Environment Minister Keith Norton today released the latest Environmental Health Bulletin containing the results of Ontario's fish testing program in 39 water bodies.

At the same time, he made public the results of testing on spottail shiner minnows taken from both the American and Canadian sides of the Niagara River which revealed trace levels of the chemical dioxin 2,3,7,8-TCDD.

Sources of the dioxin in the minnows are believed to be previous disposal practices at sites associated with the chemical industry on the New York side of the Niagara River.

Fish species from Lake Ontario and from the lower Niagara River contained 2,3,7,8-TCDD but in no case, except lake trout from the Port Credit area, did the average value exceed the 20 parts per trillion federal guideline. No dioxin was detected in fish from the Grand River near Waterloo and trace levels of 1 to 2 parts per trillion were measured in 3 of 11 lake trout from Lake Superior.

Niagara River and Lake Ontario drinking water supplies were tested for 2,3,7,8-TCDD and other contaminants found in the minnows and sport fish. Dioxin was not found in any water sample at or above the detection limit of 0.2 parts per trillion. Mirex and DDT were not found in water samples. PCB has been measured occasionally in Lake Ontario waters but concentrations are much below the interim Ontario drinking water objective of 0.003mg/L.

"As I have stated, our drinking water is safe and of good quality," said Mr. Norton. "I am concerned, however, about the potential long-term problems which these increased levels of dioxin in fish may present."

"Findings for 11 lake trout collected in the Port Credit area of western Lake Ontario are of particular concern. Dioxin 2,3,7,8-TCDD in these fish averaged 27.4 parts per trillion, with individual values ranging from 17 to 57 ppt."

These findings mark the first time in the Ministry's dioxin testing program that the average concentration of a sampling of fish exceeds the 20 ppt federal guideline. These trout also exceed the unrestricted consumption guidelines for PCB and mirex.

Mr. Norton said that medical specialists with the Ontario Ministry of Labour have recommended the continuation of "limited consumption" advice for lake trout from the Port Credit area as defined in the October, 1981, Environmental Health Bulletin.

This recommends that an adult male should consume only one or two meals of lake trout a month and that no lake trout caught in the area should be consumed by women of child-bearing age and children under the age of 15. Anglers are advised to consult the "Guide to Eating Ontario Sport Fish" for advice on consumption of specific species at specific locations.

The Minister outlined a series of steps which he said would leave no doubt in anyone's mind about the seriousness with which Ontario views the new findings.

He has written to Robert Flacke, Commissioner of the New York State Department of Environmental Conservation, proposing an immediate meeting to assign priorities for cracking down on pollution sources.

Premier Davis, he said, plans to raise pollution of the Niagara River at the New York-Ontario conference which Governor Carey of New York has proposed. And, Ontario's concerns about the Niagara River will be emphasized again, he said, when Premier Davis attends a meeting in June of Great Lakes governors initiated by Governor William Milliken of Michigan.

In addition, the U.S.-Canada Niagara River Toxics Committee is pressing ahead with long-range plans to control hazardous contaminants in the Niagara River.

The Environment Ministry's special scientific team, the Niagara River Improvement Committee, has been authorized to recruit a hydrogeologist to zero in on suspected sources of contamination in New York State, including the Hyde Park and Love Canal dump sites, he said.

Details of Ontario's new scientific findings are being provided to U.S. federal and New York State authorities and to all of the U.S. and Canadian environmental groups involved in recent judicial proceedings on Niagara River pollution problems.

"PCB and dioxin concentrations in minnows from Cayuga Creek, which contains drainage from the Love Canal area, reinforce our concerns about seepage of contaminants from industrial waste disposal sites," the Minister said.

The dioxin level, averaging 59 parts per trillion of 2,3,7,8-TCDD at the Cayuga Creek site, was four times higher than dioxin in minnows from other Niagara River locations sampled in 1981.

Dioxin was not detected in spottail shiners collected in the Nanticoke area of eastern Lake Erie, which is upstream from and unaffected by industrial waste losses to the Niagara River.

"The current test results support earlier tests which showed that levels of 2,3,7,8-TCDD are higher in Lake Ontario fish than in fish from other Ontario water bodies tested," Mr. Norton said. "And they support the opinion that Niagara Falls, New York, is the main source of this chemical in Lake Ontario fish."

-4-

"Our scientists are convinced that the dioxin came in, and is continuing to come in, from the American side," Mr. Norton said. "Our findings give clear indication of a potential long-term problem. Chemical sources in New York State must come under much tighter control and additional clean-up may be necessary."

-30-

NIAGARA RIVER SPOTTAIL SHINERS - 1981 COLLECTION

TABLE 1

<u>LOCATION</u>	<u>PCB(ppb)</u>	<u>DDT(ppb)</u>	<u>MIREX(ppb)</u>	<u>2,3,7,8-TCDD(ppt)</u>
Upper Niagara River near Fort Erie, Ontario (Ontario)	164	37	ND	15
Upper Niagara Opposite 102nd Street Disposal Area (New York)	327	9	17	7.5
Mouth of Cayuga Creek Downstream from Love Canal (New York)	573	23	18	59
Lower Niagara River at Lewiston (New York)	405	74	12	--
Lower Niagara River at Peggy's Eddy (New York)	309	189	6	7
Lower Niagara River near Queenston (Ontario)	329	107	15	--
Lower Niagara River near Niagara-on-the- Lake (Ontario)	327	73	10	13.5
Lake Erie at Nanticoke (Ontario)	--	--	--	ND*

* Not Detected

2,3,7,8-TCDD IN SPORT FISH

TABLE 2

<u>LOCATION</u>	<u>SPECIES</u>	<u>LENGTH (cm)</u>		<u>2,3,7,8-TCDD(ppt) IN DORSAL FILLET</u>	
		<u>MEAN</u>	<u>RANGE</u>	<u>MEAN</u>	<u>RANGE</u>
Lake Ontario at Clarkson (Port Credit)	Lake Trout (11)	60.9	(50.9-69.5)	27.4	(17.0-57.0)
Lake Ontario at Humber Bay (Toronto)	Lake Trout (6)	47.3	(43.-51.)	17.8	(6.0-28.0)
	R. Smelt (3c)	17.7	(15.-21.)	8.0	(7.0-10.0)
Lake Ontario at Ganaraska R. (Port Hope)	Rainbow Trout (7)	62.0	(45.8-73.9)	8.3	(7.0-11.0)
Lower Niagara River near Queenston	S.M. Bass (6)	28.8	(18.8-43.6)	12.7	(ND*-30.0)
	Y. Perch (5)	27.3	(26.0-28.2)	6.6	(3.0-13.0)
	R. Bass (5)	19.8	(18.0-21.0)	2.4	(ND*-5.0)
Grand River at Breslau (Waterloo)	S.M. Bass (8)	24.8	(18.0-35.0)	ND*	(ND*)
	R. Bass (5)	16.8	(14.0-19.0)	ND*	(ND*)
Lake Superior at Peninsula Harbour	Lake Trout (11)	44.9	(34.0-64.0)	0.45	(ND*-2.0)

*ND - Not detected at a 1. ppt Detection Limit

March/April 1982

ENVIRONMENTAL HEALTH BULLETIN

Ontario's Fish Contaminants Information Program

Environment Ontario issues bulletins on a routine basis to provide Ontario residents with up-to-date information on the results of fish collected and tested for contaminants such as mercury and PCB.

This bulletin contains information on fish collected from 39 water-courses and supplements the information on about 1102 lakes and rivers contained in the "Guide to Eating Ontario Sport Fish" booklets published in April, 1981 and subsequent Environmental Health Bulletins.

For each lake, the individual fish species tested are categorized according to size and contaminant concentration. Safe consumption limits can be determined by consulting the following "Fish Consumption Guidelines" table.

FISH CONSUMPTION GUIDELINES

(Expressed in meals per week or month with a meal consisting of an 8-ounce portion)

<u>CATEGORY</u>	<u>LENGTH OF FISHING VACATION</u>			
	<u>ONE WEEK</u>	<u>TWO WEEKS</u>	<u>THREE WEEKS</u>	<u>LONG-TERM CONSUMERS *</u>
A	← NO RESTRICTIONS →			
B	10 Meals/Week	5 Meals/Week	4 Meals/Week	1 Meal/Week
C	7 Meals/Week	4 Meals/Week	3 Meals/Week	3 Meals/Month
D	← NO CONSUMPTION →			
X	1 or 2 Meals/Week	1 or 2 Meals/Week	1 or 2 Meals/Week	1 or 2 Meals/Month

- indicates that fish from these size ranges were not collected and consumption guidelines are not available.

* For the purpose of these guidelines, those people who fish on and off for part of the year exceeding three weeks are considered long-term consumers.

NOTE: WOMEN OF CHILDBEARING AGE AND CHILDREN UNDER 15 YEARS OF AGE SHOULD EAT ONLY FISH FROM THE "A" CATEGORY.



Ministry
of the
Environment

Hon. Keith C. Norton, Q.C.,
Minister

G rard J. M. Raymond
Deputy Minister

The recommended maximum consumption levels depend upon the period of time over which fish are consumed (1 week, 2 weeks, etc.) and the contaminant concentration in the fish. The categories A, B, C, and D in the above guideline represent levels of mercury from less than 0.5 parts per million (A) to over 1.5 parts per million (D). Fish categorized as "X" contain one or more organic contaminants (PCB, DDT, mirex, or 2,3,7,8-TCDD) at concentrations exceeding federal, unrestricted consumption guidelines.

To determine the recommended level of consumption of a given fish:

1. Identify the species.
2. Measure the length of the fish from the tip of the tail to the tip of the nose.
3. Check the lake table for the appropriate lake.
4. Note the category letter for the particular fish you are checking.
5. Determine the consumption recommendations from the "Fish Consumption Guidelines" table above.

As well as the lake name and its geographical location, the table includes the species of fish collected and the contaminants sampled for (e.g. Hg-mercury) and the level of contaminant in fish of each size caught as represented by a category letter defined above.

For any given fish and location, the fact that analysis was performed for a specific contaminant does not necessarily indicate that it was detected.

Booklets entitled "Guide to Eating Ontario Sport Fish", outlining the facts about fish contamination and the resultant health implications are now available from local offices of the ministries of the Environment and Natural Resources and in northern Ontario, the Ministry of Northern Affairs. For information concerning specific waterbodies and fish species, these local offices should be contacted.

The Ontario Government is continuing to sample fish from many lakes throughout the Province. As further information on additional waterbodies becomes available, listings will be made available to the media and data can be obtained from the local offices of the ministries of the Environment and Natural Resources.

FOR FURTHER INFORMATION: A. Johnson (416) 965-6954
 J. Ralston (416) 965-6954
 D. Helliwell (416) 965-1658

(Version française disponible)

LAKE LOCATION CO-ORDINATES	CONTAMINANTS SAMPLED	SPECIES	SIZE RANGE IN CENTIMETRES (INCHES)									
			<15 <6	15-20 6-8	20-25 8-10	25-30 10-12	30-35 12-14	35-45 14-18	45-55 18-22	55-65 22-26	65-75 26-30	75 30
Central Region												
Raven Lake 4512/7851 Sherbourne Twp. Haliburton Co.	Hg. Hg.	Lake Trout Smallmouth Bass	- -	- -	- A	- A	A A	A B	B B	C -	D -	- -
West-Central Region												
Grand River (Breslau) 4328/8025 Waterloo R.M.	2,3,7,8-TCDD. "	Smallmouth Bass Rock Bass	- A	A A	A -	A -	A -	- -	- -	- -	- -	- -
Northeastern Region												
Kenogaming Lake 4805/8155 Regan & Kenogaming Twps. Sudbury Dist.	Hg. Hg. Hg. Hg.	Whitefish Northern Pike White Sucker Walleye	- - - -	- - A -	- - A A	A - A A	A A A A	- A A B	- A - C	- B - D	- B - -	- C - -
Lac La France 4920/8028 Bragg Twp. Cochrane Dist.	Hg.	Walleye	-	-	-	-	B	B	-	-	-	-
Little Abitibi Lake 4924/8033 Sangster Twp. Cochrane Dist.	Hg. Hg.	Northern Pike Walleye	- -	- -	- -	- A	A A	B A	B -	C -	D -	- -
Little Kesagami Lake 4945/8016 Cochrane Dist.	Hg. Hg.	Walleye Northern Pike	- -	- -	- -	A -	A -	A A	B A	- A	- B	- B
Lower Tweed Lake 4932/8016 Tweed & Blakelock Twps. Cochrane Dist.	Hg, As. Hg, As.	Walleye Northern Pike	- -	- -	- -	- -	A -	B A	B A	- B	- C	- -
Mattagami Lake 4752/8135 Sudbury Dist.	Hg. Hg. Hg.	Walleye Northern Pike Whitefish	- - -	- - A	- A A	A A A	B A A	C A B	D B -	D C -	D D -	- D -
Mistango Lake 4907/8027 Freele Twp. Cochrane Dist.	Hg.	Northern Pike	-	-	-	-	-	A	A	B	B	-
Nellie Lake 4848/8048 Calvert & Aurora Twps. Cochrane Dist.	Hg.	Northern Pike	-	-	-	-	-	B	C	D	D	D
Nettogami Lake 5013/8034 Cochrane Dist.	Hg. Hg.	Walleye Northern Pike	- -	- -	- -	- -	A -	B A	- A	- A	- B	- -
North Tweed Lake 4936/8017 Cochrane Dist.	Hg, As.	Northern Pike	-	-	-	-	-	A	A	B	-	-
			100-115 40-45		115-150 45-60							
Ottawa River (Mattawa to Deux Rivières) 4611/7830 Papineau, Cameron & Clara Twps. Nipissing Dist.	Hg.	Sturgeon	A	A								
Ouellet Lake 4919/8147 Haggart Twp. Cochrane Dist.	Hg.	Walleye	-	-	-	-	B	B	C	C	-	-
Rawcourt Lake 4905/8112 Clute Twp. Cochrane Dist.	Hg.	Northern Pike	-	-	-	A	A	A	A	B	B	-
Reaume Lake 4854/8108 Reaume Twp. Cochrane Dist.	Hg.	Northern Pike	-	-	-	-	-	A	B	B	-	-
Shirley Lake 4927/8027 Tweed Twp. Cochrane Dist.	Hg, As.	Northern Pike	-	-	-	-	A	A	B	C	D	-
South Floodwood Lake 4922/8019 Bragg Twp. Cochrane Dist.	Hg. Hg.	Walleye Northern Pike	- -	- -	- -	- -	A -	B -	B A	- B	- B	- C
Upper Kesagami Lake 4940/8017 Cochrane Dist.	Hg, As.	Walleye	-	-	-	-	B	B	C	-	-	-
Wakwayowkastic Lake 4936/8019 Cochrane Dist.	Hg, As. Hg, As.	Walleye Northern Pike	- -	- -	- -	- -	A A	B A	C B	- B	- B	- C
Wilson Lake 4844/8049 McCart Twp. Cochrane Dist.	Hg. Hg.	Northern Pike Yellow Perch	- -	- -	- A	- B	- -	A -	B -	B -	B -	- -
Zinger Lake 4925/8044 Potter Twp. Cochrane Dist.	Hg.	Walleye	-	-	-	-	-	B	D	-	-	-
Lake 17H-51 4931/8019 Tweed Twp. Cochrane Dist.	Hg, As. Hg, As.	Walleye Northern Pike	- -	- -	- -	- -	A -	B A	B A	- B	- B	- C

LAKE LOCATION CO-ORDINATES	CONTAMINANTS SAMPLED	SPECIES	SIZE RANGE IN CENTIMETRES (INCHES)												65-75 26-30	75 > 30
			< 15 < 6	15-20 6-8	20-25 8-10	25-30 10-12	30-35 12-14	35-45 14-18	45-55 18-22	55-65 22-26	65-75 26-30	75 > 30				
Lake 211-04 5004/8019 Cochrane Dist.	Hg, As.	Northern Pike	-	-	-	-	A	A	B	C	D	-	-			
Northwestern Region																
Bruce Lake 5049/9320 Kenora Dist.	Hg. Hg. Hg.	Walleye Northern Pike White Sucker	- - -	- - A	- - A	A A A	A A A	B A A	B A A	C B -	- B -	- C -	- -			
Eagle Lake 4942/9313 Kenora Dist.	Hg. Hg.	Walleye Northern Pike	- -	- -	- -	- -	- -	A -	A -	B A	- B	- -	- -			
Fields Lake 4919/8524 Thunder Bay Dist.	Hg. Hg.	Walleye Northern Pike	- -	- -	- -	A -	A -	B A	C B	D B	- C	- -	- -			
Missisa Lake 5218/8512 Kenora Dist.	Hg. Hg. Hg.	White Sucker Walleye Whitefish	- - -	- - A	- - A	- A A	- A A	A B A	A C -	- -	- -	- -	- -			
Lake Nipigon (Ombabika Bay) 5012/8815 Thunder Bay Dist.	Hg, PCB. " "	Walleye Longnose Sucker Sauger Cisco	- - - -	- - A A	- - A A	A - A A	A A -	B A -	B -	- -	- -	- -	- -			
Pakwash Lake 5045/9330 Kenora Dist.	Hg. Hg. Hg.	Walleye White Sucker Northern Pike	- - -	- - -	A -	A A -	A A -	A A A	A A A	B C A	- -	- A	- B			
Trout Lake 5115/9315 Kenora Dist.	Hg.	Walleye	-	-	-	-	-	A	B	C	D	-	-			
Great Lakes																
(Lower) Niagara River (Queenston) 4310/7903 Niagara R.M.	Hg, PCB, Mirex, Pest., 2,3,7,8-TCDD. " 2,3,7,8-TCDD. " " " Hg, PCB, Mirex, Pest. PCB, Mirex, Pest. 2,3,7,8-TCDD. "	American Eel Yellow Perch Walleye Rainbow Trout Northern Pike Muskie White Sucker Coho Rock Bass Smallmouth Bass	- - - - - - - - - - -	- A - - - - - - A - A	- A - - - - - - A A	- A - - - - - - A A	- - - - - - - - A A	- - - - - - - - A A	A - A -	X - - A -	X - - A -	X - - -	X - - -			
Lake Ontario #1 (Credit River) (Clarkson) 4333/7935 Peel R.M.	Hg, PCB, Mirex, Pest., 2,3,7,8-TCDD. Hg, PCB, Mirex, Pest. Hg, PCB, Mirex. PCB, Mirex, Pest., 2,3,7,8-TCDD.	Coho White Bass Rainbow Trout Lake Trout	- - - -	- - - -	- A -	- A A	- - -	- - -	X X A	X X A	X X A	X X X	X -			
Lake Ontario #1 (Humber Bay area) Metro Toronto	Hg, PCB, Mirex, Pest., 2,3,7,8-TCDD. " Hg, PCB, Mirex, Pest. " " " "	Rainbow Smelt Lake Trout White Sucker Brown Bullhead White Bass Yellow Perch Northern Pike Carp Largemouth Bass	A - - - A A A A A -	A - A A X X - A A	A - A X X X - A A	- - A X X A B A	- - X X X A -	- X X -	- X X -	- X A -	- X A -	- X A -	- -			
Lake Ontario #2 (Ganaraska River) (Port Hope) 4357/7818 Hope Twp. Northumberland Co.	Hg, PCB, Mirex, Pest. Hg, PCB, Mirex, Pest., 2,3,7,8-TCDD.	Rainbow Smelt Rainbow Trout	X -	X -	- -	- -	- X	- X	- X	- X	- X	- X	- X			
Lake Erie #4 (Selkirk Park area) 4249/7958 Walpole Twp. Haldimand-Norfolk R.M.	Hg, PCB, Mirex, Pest.	Yellow Perch	-	A	A	A	A	-	-	-	-	-	-			
Lake St. Clair 4228/8240 Essex & Kent Cos.	Hg, PCB, Mirex, Pest. " " " " Hg. Hg. Hg. Hg. Hg. Hg. Hg. Hg. Hg. Hg. Hg, PCB, Mirex, Pest.	Walleye White Bass Channel Catfish Smallmouth Bass Yellow Perch Carp Rock Bass Northern Pike White Sucker Black Crappie Largemouth Bass Bluegill Pumpkinseed Freshwater Drum Quillback Carpsucker Redhorse Sucker Brown Bullhead	- - - - - - A - - - - - A - - - -	- A A A A - B - - A A A A A A	- A A B B - C D - A A A A A A	- B A B C D - - - - - - B B C C C	- D A C -	- D C D D D D D D D D D D D D D	- B X D -	- X -	- X -	- X -	- X -			
Lake St. Clair 4228/8240	Hg, PCB, Mirex, Pest. "	Muskie Sturgeon	B -	C -	D A	D B	D D	D D	D D	D D	D D	D D	D D			
Lake Superior #5 (Peninsula Harbour) 4844/8625 Thunder Bay Dist.	Hg, PCB, Mirex, Pest., 2,3,7,8-TCDD. Hg, PCB, Mirex, Pest. " " Hg.	Lake Trout Whitefish White Sucker Longnose Sucker Redhorse Sucker	- - - - -	- A A A A	- - B B B	A B B X B	A B B X C	A D X X D	X X D D D	X X -	X -	X -	X -			
Lake Superior #6 (southwest of Michipicoten Island) 4740/8608 Algoma Dist.	Hg.	Lake Trout	-	-	-	-	-	-	B	C	C	-	-			

THE HONOURABLE KEITH C. NORTON, Q.C.
MINISTER OF THE ENVIRONMENT

A STATEMENT TO THE LEGISLATURE

ON THE

NEW EVIDENCE OF CHEMICAL CONTAMINATION IN FISH

APRIL 1, 1982

MR. SPEAKER:

LAST OCTOBER I REPORTED TO HONOURABLE MEMBERS ON THE RESULTS UP TO THAT TIME OF MY MINISTRY'S COMPREHENSIVE TESTING PROGRAMS FOR CHEMICALS IN FISH. I WISH TODAY TO BRING THAT INFORMATION UP TO DATE.

I WOULD EMPHASIZE, AT THE OUTSET, TWO POSITIVE FACTORS: ONE, THE INCREASING ABILITY OF OUR ENVIRONMENTAL SCIENTISTS TO DETECT AND ANALYZE MINUTE QUANTITIES OF A WIDE RANGE OF CHEMICALS, AND, TWO, THE HIGH PRIORITY THAT HAS BEEN ASSIGNED TO THIS CONTINUING AND EXPANDING ACTIVITY.

I WILL DESCRIBE THE RESULTS OF TWO SERIES OF TESTS, ONE ON MINNOWS FROM THE CANADIAN AND AMERICAN SIDES OF THE NIAGARA RIVER AND ONE ON SPORT FISH IN LAKE ONTARIO, THE NIAGARA RIVER, THE GRAND RIVER AND LAKE SUPERIOR.

SPOTTAIL SHINER MINNOWS TAKEN FROM THE NIAGARA RIVER CONTAINED TRACE LEVELS OF THE CHEMICAL KNOWN AS DIOXIN 2,3,7,8-TCDD. OUR SCIENTISTS ARE SATISFIED THAT THE DIOXIN ORIGINATED ON THE NEW YORK SIDE OF THE RIVER AS THE RESULT OF PREVIOUS DISPOSAL PRACTICES AT SITES ASSOCIATED WITH CHEMICAL COMPANIES IN THE BUFFALO-NIAGARA FALLS, NEW YORK AREA.

FISH SPECIES FROM LAKE ONTARIO AND FROM THE LOWER NIAGARA RIVER CONTAINED 2,3,7,8-TCDD BUT IN NO CASE, EXCEPT IN THE LAKE TROUT FROM THE PORT CREDIT AREA, DID THE AVERAGE VALUE EXCEED THE 20 PARTS PER TRILLION FEDERAL GUIDELINE. NO DIOXIN WAS DETECTED IN FISH FROM THE GRAND RIVER NEAR WATERLOO AND TRACE LEVELS OF 1 OR 2 PARTS PER TRILLION WERE MEASURED IN 3 OF 11 LAKE TROUT FROM LAKE SUPERIOR.

NIAGARA RIVER AND LAKE ONTARIO DRINKING WATER SUPPLIES WERE TESTED FOR 2,3,7,8-TCDD AND OTHER CONTAMINANTS FOUND IN THE MINNOWS AND SPORT FISH. DIOXIN WAS NOT FOUND IN ANY WATER SAMPLE AT OR ABOVE THE DETECTION LIMIT OF 0.2 PARTS PER TRILLION. MIREX AND DDT WERE NOT FOUND IN ANY WATER SAMPLES. PCB HAS BEEN MEASURED OCCASIONALLY IN LAKE ONTARIO WATERS BUT CONCENTRATIONS ARE MUCH BELOW THE INTERIM ONTARIO DRINKING WATER OBJECTIVE OF 0.003mg/L.

HOWEVER, FINDINGS FOR 11 LAKE TROUT COLLECTED IN THE PORT CREDIT AREA OF WESTERN LAKE ONTARIO ARE OF PARTICULAR CONCERN. DIOXIN 2,3,7,8-TCDD IN THESE FISH AVERAGED 27.4 PARTS PER TRILLION, WITH INDIVIDUAL VALUES RANGING FROM 17 TO 57 PPT.

THESE FINDINGS MARK THE FIRST TIME IN THE MINISTRY'S DIOXIN TESTING PROGRAM THAT THE AVERAGE CONCENTRATION OF A SAMPLING OF FISH EXCEEDS THE 20 PPT FEDERAL GUIDELINE. THESE TROUT ALSO EXCEED THE UNRESTRICTED CONSUMPTION GUIDELINES FOR THE CHEMICAL SUBSTANCES PCB AND MIREX.

MEDICAL SPECIALISTS WITH THE ONTARIO MINISTRY OF LABOUR WERE CONSULTED BY MY STAFF AND HAVE RECOMMENDED THE CONTINUATION OF "LIMITED CONSUMPTION" ADVICE FOR LAKE TROUT FROM THE PORT CREDIT AREA AS DEFINED IN THE OCTOBER, 1981, ENVIRONMENTAL HEALTH BULLETIN.

THIS RECOMMENDS THAT AN ADULT MALE SHOULD CONSUME ONLY ONE OR TWO MEALS OF LAKE TROUT A MONTH AND THAT NO LAKE TROUT CAUGHT IN THE AREA SHOULD BE CONSUMED BY WOMEN OF CHILD-BEARING AGE OR BY CHILDREN UNDER THE AGE OF 15. ANGLERS AND CONSUMERS ARE ADVISED TO CONSULT THE "GUIDE TO EATING ONTARIO SPORT FISH" PUBLISHED BY THE ONTARIO GOVERNMENT FOR ADVICE ON CONSUMPTION OF SPECIFIC SPECIES AT SPECIFIC LOCATIONS.

PCB AND DIOXIN CONCENTRATIONS IN MINNOWS FROM CAYUGA CREEK, NEW YORK, WHICH CONTAINS DRAINAGE FROM THE LOVE CANAL AREA, REINFORCE CONCERNS ABOUT SEEPAGE OF CONTAMINANTS FROM INDUSTRIAL WASTE DISPOSAL SITES.

THE DIOXIN LEVEL, AVERAGING 59 PARTS PER TRILLION OF 2,3,7,8-TCDD AT THE CAYUGA CREEK SITE, WAS FOUR TIMES HIGHER THAN DIOXIN IN MINNOWS FROM OTHER NIAGARA RIVER LOCATIONS SAMPLED IN 1981.

DIOXIN WAS NOT DETECTED IN SPOTTAIL SHINERS COLLECTED IN THE NANTICOKE AREA OF EASTERN LAKE ERIE, WHICH IS UPSTREAM FROM AND UNAFFECTED BY INDUSTRIAL WASTE LOSSES TO THE NIAGARA RIVER.

THE CURRENT TEST SPORT FISH RESULTS SUPPORT EARLIER TESTS WHICH SHOWED THAT LEVELS OF 2,3,7,8-TCDD ARE HIGHER IN LAKE ONTARIO FISH THAN IN FISH FROM OTHER ONTARIO WATER BODIES TESTED AND THEY SUPPORT THE OPINION THAT INDUSTRIAL WASTE DISPOSAL SOURCES IN THE NIAGARA FALLS, NEW YORK, AREA ARE THE MAIN SOURCE OF THIS CHEMICAL IN LAKE ONTARIO FISH.

AS I HAVE STATED, OUR DRINKING WATER IS SAFE AND OF GOOD QUALITY. I AM CONCERNED, HOWEVER, ABOUT THE POTENTIAL LONG-TERM PROBLEMS WHICH THESE INCREASED LEVELS OF DIOXIN IN FISH MAY PRESENT.

CONSISTENT WITH MY CONCERN, I WOULD LIKE TO OUTLINE FOR HONOURABLE MEMBERS SOME OF THE STEPS I HAVE TAKEN SO THAT THERE WILL BE NO DOUBT IN ANYONE'S MIND ABOUT HOW SERIOUSLY I VIEW THESE DEVELOPMENTS.

THESE NEW DIOXIN FINDINGS BY OUR ONTARIO SCIENTISTS ARE BEING COMMUNICATED IMMEDIATELY TO THE CANADIAN MINISTER OF THE ENVIRONMENT, THE HONOURABLE JOHN ROBERTS, AND TO THE APPROPRIATE OFFICIALS OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY AND THE NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION.

IN ADDITION, I HAVE INSTRUCTED MY OFFICIALS TO SEND COPIES TO ALL OF THE U.S. AND CANADIAN ENVIRONMENTAL GROUPS INVOLVED IN RECENT JUDICIAL PROCEEDINGS ON NIAGARA RIVER POLLUTION PROBLEMS.

I AM SEEKING, AT THE EARLIEST POSSIBLE DATE, A MEETING WITH THE HONOURABLE ROBERT FLACKE, COMMISSIONER OF THE NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION, TO DISCUSS NEW AND URGENT PRIORITIES FOR POLLUTION CRACKDOWNS.

IN ADDITION, PREMIER DAVIS WILL RAISE THE QUESTION OF DISCHARGE TO THE NIAGARA RIVER AT HIS PENDING MEETING WITH GOVERNOR CAREY OF NEW YORK STATE.

THE PREMIER HAS ACCEPTED AN INVITATION FROM THE GOVERNOR OF MICHIGAN, MR. MILLIKEN, TO PARTICIPATE IN A MEETING ON MACKINAC ISLAND ABOUT GREAT LAKE PROBLEMS. WE WILL TAKE THIS OPPORTUNITY TO RAISE OUR CONCERNS OVER TRANS-BOUNDARY POLLUTION, AND ESPECIALLY THE QUESTION OF CHEMICAL DISCHARGES INTO THE NIAGARA RIVER RAISED BY OUR CURRENT FINDINGS.

THE U.S.-CANADA NIAGARA RIVER TOXICS COMMITTEE IS CONTINUING DEVELOPMENT OF LONG-RANGE PLANS FOR THE CONTROL OF HAZARDOUS CONTAMINANTS IN THE NIAGARA RIVER AND ONTARIO WILL CONTINUE TO PARTICIPATE IN HEARINGS HELD IN THE U.S. TO DEAL WITH POLLUTION OF THE RIVER.

THE HONOURABLE MEMBERS WILL RECALL THAT IN NOVEMBER I ESTABLISHED A SPECIAL SCIENTIFIC TEAM TO DEAL WITH THE PROBLEM OF POLLUTION OF THE NIAGARA RIVER AND TO ENSURE THAT THE QUALITY OF THIS RIVER IS PROTECTED AND IMPROVED.

MY MINISTRY'S NIAGARA RIVER IMPROVEMENT TEAM HAS BEEN IN OPERATION FOR SOME MONTHS AND I HAVE NOW EXPANDED THIS TEAM TO INCLUDE A HYDROGEOLOGIST TO ZERO IN ON THE SUSPECTED SOURCE OF CONTAMINATION ON THE NEW YORK SIDE, INCLUDING THE HYDE PARK AND LOVE CANAL DUMP SITES.

OUR SCIENTISTS ARE CONVINCED THAT THIS DIOXIN ORIGINATED AND IS CONTINUING TO ENTER OUR WATERS FROM AMERICAN SOURCES. OUR FINDINGS GIVE CLEAR INDICATION OF A POTENTIAL LONG-TERM PROBLEM. CHEMICAL SOURCES IN NEW YORK STATE MUST COME UNDER TIGHTER CONTROL AND SOME ADDITIONAL CLEAN-UP MAY BE NECESSARY.

11-1