

THE HONOURABLE ANDREW S. BRANDT
MINISTER OF THE ENVIRONMENT

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A STATEMENT TO THE LEGISLATURE

ON

THE ONTARIO MINISTRY OF THE ENVIRONMENT
SAMPLING PROGRAM FOR DIOXINS
IN RAW AND TREATED DRINKING WATER

FRIDAY, DECEMBER 9, 1983

MR. SPEAKER:

I AM PLEASED TO BRING HONOURABLE MEMBERS UP TO DATE ON THE RESULTS OF MY MINISTRY'S EXTENSIVE SAMPLING AND ANALYSIS PROGRAM FOR DIOXINS AND FURANS IN BOTH RAW AND TREATED DRINKING WATER.

APPLYING OUR NEWLY DEVELOPED CAPABILITY OF DETECTING QUANTITIES TO A LEVEL OF 10 PARTS PER QUADRILLION, MY MINISTRY TESTED SAMPLES FROM 15 WATER TREATMENT PLANTS IN THE WESTERN END OF LAKE ONTARIO, INCLUDING THE NIAGARA RIVER-WELLAND CANAL AREA.

ONE PART PER QUADRILLION, I MIGHT MENTION, IS EQUIVALENT TO ONE SECOND IN 32 MILLION YEARS. OR, MR. SPEAKER, THE WIDTH OF ONE HUMAN HAIR IN A DISTANCE EQUAL TO 1,000 TIMES ROUND THE WORLD.

WITHIN THIS MINUTE DETECTION LIMIT THERE WERE NO DIOXINS OR FURANS FOUND IN ANY SAMPLES OF DRINKING WATER TESTED.

IN MY MINISTRY'S CURRENT SERIES OF TESTS, WE DID FIND TRACE AMOUNTS OF ONE OF THE 75 KNOWN FORMS OF DIOXINS. THIS WAS DISCOVERED IN SAMPLES OF RAW WATER ONLY FROM ST. CATHARINES AND THE LAKEVIEW PLANT AREA OF MISSISSAUGA.

WHILE THE EXTREMELY LOW LEVELS OF DIOXIN
DETECTED IN THE TWO RAW WATER SAMPLES DO NOT
CONSTITUTE A HEALTH RISK, AT THE SAME TIME, I AM
CONCERNED THAT THESE SUBSTANCES WERE FOUND AT ALL.

ALTHOUGH WE DO NOT KNOW THE PRECISE SOURCE OF
THE DIOXINS, WE DO KNOW THAT WASTE SITES ON THE
U.S. SIDE OF THE NIAGARA RIVER CONTAIN THIS
SUBSTANCE.

FOR THIS REASON, I BELIEVE THAT THE FEDERAL
MINISTER OF THE ENVIRONMENT MUST USE HIS OFFICE TO
EFFECT AN EARLY CLEAN-UP OF THOSE WASTE SITES. IN
THE MEANTIME, MY MINISTRY'S NIAGARA RIVER
IMPROVEMENT TEAM WILL MAINTAIN ITS ONGOING EFFORTS
TO REDUCE CONTAMINATION OF THE RIVER.

I WANT TO EMPHASIZE THESE TRACE AMOUNTS WERE
FOUND IN RAW, UNTREATED WATER. NO AMOUNT, NO
MATTER HOW SMALL, HAS BEEN FOUND IN ANY SAMPLE OF
ONTARIO DRINKING WATER AT ANYTIME.

MY MINISTRY HAS BEEN TESTING RAW AND DRINKING WATER SAMPLES FROM LAKE ONTARIO AND THE NIAGARA RIVER AREA FOR MORE THAN A YEAR. IN FEBRUARY, MY PREDECESSOR, THE HONOURABLE KEITH NORTON, ANNOUNCED THAT WE HAD FOUND TRACE AMOUNTS OF DIOXIN IN RAW WATER FROM THE NIAGARA RIVER AND A CHANNEL OFF THE WELAND CANAL NEAR ST. CATHARINES.

IN CO-OPERATION WITH MY MINISTRY'S INTERNATIONAL SCIENTIFIC ADVISORY COMMITTEE ON DIOXINS AND WITH SCIENTISTS AT HEALTH AND WELFARE CANADA, OUR SCIENTISTS HAVE DEVELOPED VERY STRINGENT TESTING STANDARDS IN ORDER TO ENSURE PAINSTAKINGLY ACCURATE RESULTS. THE COMMITTEE MEMBERS REPORT OUR ANALYTICAL METHODS ARE AS GOOD AS ANY TECHNIQUES CURRENTLY BEING APPLIED ANYWHERE IN THE WORLD.

THE RESULTS I AM REPORTING TODAY HAVE BEEN REVIEWED BY MY ADVISORY COMMITTEE OF EXPERTS ON DIOXINS CHAIRED BY DR. E. Y. SPENCER AND INCLUDING OTHER DISTINGUISHED SCIENTISTS FROM QUEBEC, THE NETHERLANDS AND THE UNITED STATES.

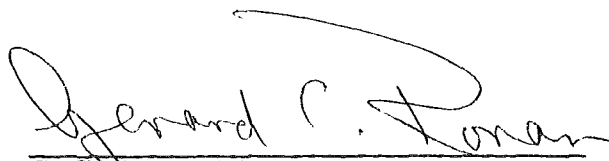
I ALSO WANT TO INFORM MEMBERS THAT OUR MONITORING PROGRAM WILL BE EXTENDED TO INCLUDE OTHER SELECTED SITES AT WHICH A CONTINUOUS DIOXIN MONITORING PROGRAM WILL BE CONDUCTED. IN ADDITION, WE INTEND TO EXPAND THE ROUTINE TESTS NOW PERFORMED FOR DRINKING WATER TO INCLUDE TESTS FOR A BROAD RANGE OF TRACE ORGANIC CHEMICALS.

MR. SPEAKER, THIS IS ONE OF A SERIES OF ON-GOING INITIATIVES UNDER WAY WITHIN MY MINISTRY TO ENSURE THAT THE RESIDENTS OF ONTARIO CONTINUE TO ENJOY A SECURE AND SAFE SUPPLY OF DRINKING WATER.

SURVEY OF CHLORINATED DIBENZODIOXINS
AND CHLORINATED DIBENZOFURANS IN SELECTED
TREATED DRINKING WATER SUPPLIES IN ONTARIO

Location	Sampling Date	Total Dioxins(ppq)					Total Furans(ppq)				
		# Chlorines					# Chlorines				
		4	5	6	7	8	4	5	6	7	8
RC Harris	83/6/6	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Easterly	83/6/9	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
St. Catharines	83/6/22	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Welland	83/6/23	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Niagara Falls	83/7/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fort Erie	83/7/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Lakeview	83/7/25	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Oakville	83/7/27	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Burlington	83/7/27	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Lorne Park	83/8/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Oshawa	83/8/23	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Hamilton	83/8/23	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Lakeview	83/9/7	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
RL Clark	83/9/8	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Port Colborne	83/9/26	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

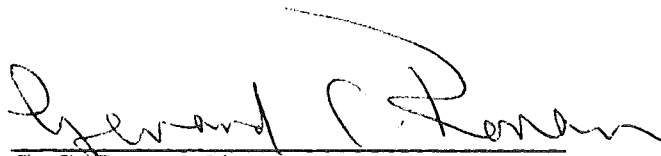
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G. C. Ronan, Director
Laboratory Services & Applied Research Branch
Ministry of the Environment

SURVEY OF CHLORINATED DIBENZODIOXINS
AND CHLORINATED DIBENZOFURANS IN SELECTED
RAW DRINKING WATER SUPPLIES IN ONTARIO

Location	Sampling Date	Total Dioxins(ppq)					Total Furans(ppq)				
		# Chlorines					# Chlorines				
		4	5	6	7	8	4	5	6	7	8
RC Harris	83/6/6	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Easterly	83/6/9	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
St. Catharines	83/6/22	nd	nd	nd	nd	<u>46/33</u>	nd	nd	nd	nd	nd
Welland	83/6/23	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Niagara Falls	83/7/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fort Erie	83/7/12	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Lakeview	83/7/25	nd	nd	nd	nd	<u>29/31</u>	nd	nd	nd	nd	nd
Oakville	83/7/27	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Burlington	83/7/27	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Lorne Park	83/8/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Oshawa	83/8/23	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Hamilton	83/8/23	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Lakeview	83/9/7	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
RL Clark	83/9/8	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Port Colborne	83/9/26	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

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