

THE MISSISSAUGA EVACUATION

FINAL REPORT

TO THE ONTARIO MINISTRY
OF THE
SOLICITOR GENERAL

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The Honourable Roy McMurtry,
Solicitor General for Ontario,
Chairman,
Cabinet Committee on Emergency Planning,
Queen's Park,
Toronto, Ontario.

Dear Mr. Minister:

On behalf of the Mississauga Study Team and of The Institute for Environmental Studies, I am pleased to submit The Mississauga Evacuation Final Report.

During the course of our study, we have enjoyed the help of many people from all levels of government, from the private sector, from voluntary organisations, and not least from the citizens of Mississauga. We gratefully acknowledge this help. Any errors of fact or judgement which appear in our report are not theirs, but ours.

We hope that all these groups will find our report interesting and useful in their efforts to deal effectively with emergencies.

Yours sincerely,



Ian Burton,
Director.

IB/lh

Encl.

COMMISSION BRIEFING

COBALT 60 CONTAMINATED STEEL

APRIL 2, 1984

BY

NRC OFFICE OF INSPECTION AND ENFORCEMENT

SCOPE OF THE BRIEFING

- HOW AND WHEN DID THE NRC LEARN ABOUT THE INCIDENT?
- WHAT WAS THE NRC RESPONSE TO THE INCIDENT?
- HOW DID THE NRC REGIONS AND PROGRAM OFFICES INTERACT TO CARRY OUT NECESSARY ACTIONS?
- HOW DID NRC INTERACT WITH THE STATES, OTHER FEDERAL AGENCIES, AND AFFECTED PRIVATE COMPANIES?
- CURRENT STATUS

NOTE: SECY 84-85 (FEBRUARY 21, 1984) AND SECY 84-85A (MARCH 26, 1984) PROVIDED ESSENTIAL DETAILS CONCERNING THE INCIDENT. OUR PLANNED BRIEFING WILL NOT REPEAT MOST OF THOSE DETAILS.

HOW AND WHEN DID THE NRC LEARN ABOUT THE INCIDENT?

- NEW MEXICO INFORMED NRC REGION IV (DALLAS) ON JANUARY 17, 1984 THAT LOS ALAMOS LABORATORY HAD DETECTED SOME RADIOACTIVE REINFORCING BARS (REBAR) IN A SHIPMENT WHICH HAD MISTAKENLY BEEN DELIVERED TO THE LAB. REGION IV NOTIFIED NRC HEADQUARTERS AND REGION V ON THE SAME DATE.
- ON JANUARY 18, 1984 NEW MEXICO DETERMINED THAT THE RADIOACTIVITY WAS DUE TO COBALT 60 AND THAT THE SHIPMENT HAD COME FROM A SUPPLIER IN MEXICO THROUGH A BROKER IN PHOENIX, ARIZONA.
- ON JANUARY 19, THE REGION ISSUED A PRELIMINARY NOTIFICATION REGARDING THE INCIDENT TO THE COMMISSION AND NRC OFFICES.
- ADDITIONAL PRELIMINARY NOTIFICATIONS WERE ISSUED ON JANUARY 27 AND FEBRUARY 3, 7, 10, AND 13 TO KEEP COMMISSION AND STAFF INFORMED OF DEVELOPMENTS.

WHAT WAS THE NRC RESPONSE TO THE INCIDENT?

OBJECTIVES

- ASSESS AND CONTROL RISK WITHIN U.S. BORDERS (PRIMARY)
- PROVIDE TECHNICAL ASSISTANCE TO MEXICO UPON REQUEST (SECONDARY)

MAIN ELEMENTS OF IMPLEMENTATION

- DETERMINE SOURCE OF CONTAMINATION.
- LOCATE AND COLLECT CONTAMINATED MATERIALS WITHIN THE U.S.
- PREVENT FURTHER CONTAMINATED MATERIALS CROSSING THE BORDER.

WHAT WAS THE NRC RESPONSE TO THE INCIDENT?

SEQUENCE OF EVENTS

- ° NRC REGION IV NOTIFIED TEXAS ON JANUARY 18 THAT A SHIPMENT OF REBAR FROM ACEROS DE CHIHUAHUA WAS LOCATED IN EL PASO.
- ° CALIFORNIA, ARIZONA, AND COLORADO WERE NOTIFIED, AS REVIEW OF CUSTOMER LISTS INDICATED POTENTIALLY CONTAMINATED REBAR HAD BEEN SHIPPED TO THOSE STATES. NMSS PROVIDED POLICY GUIDANCE ON ACCEPTABLE RADIATION LEVELS FOR REBAR INSTALLED IN CONCRETE.
- ° ON JANUARY 19, 1984 INTERNATIONAL PROGRAMS INFORMED ITS RADIATION SAFETY CONTACT IN MEXICO ABOUT THE INCIDENT.
- ° ON JANUARY 24 REGION IV PROVIDED U.S. CUSTOMS WITH A RADIATION SURVEY INSTRUMENT AND TRAINED CUSTOMS PERSONNEL IN ITS USE. THE INSTRUMENT WAS USED TO MONITOR SHIPMENTS OF STEEL AT THE PRINCIPAL COMMERCIAL CROSSING BETWEEN JUAREZ AND EL PASO.

WHAT WAS THE NRC RESPONSE TO THE INCIDENT (CONTINUED)

- ON JANUARY 20, THE MEXICAN NATIONAL COMMISSION ON NUCLEAR SAFETY AND SAFEGUARDS (CNSNS) INFORMED NRC THAT A CNSN TEAM, APPARENTLY IN COOPERATION WITH TEXAS INSPECTORS, HAD FOUND A SCRAP STEEL YARD, "JUNKE FENIX", THAT CONTAINED A PILE OF SCRAP WITH A RADIATION LEVEL OF 20 R/HR. THE SOURCE WAS SMALL GRANULES OF MATERIAL.
- IN LATE JANUARY, TEXAS PERFORMED RADIATION SURVEYS IN THE VICINITY OF THE BRIDGES BETWEEN JUAREZ AND EL PASO AND FOUND NO CONTAMINATION.
- NRC REGION III (CHICAGO) WAS INFORMED ON JANUARY 25 THAT FALCON PRODUCTS IN ST. LOUIS, MISSOURI HAD RECEIVED POTENTIALLY CONTAMINATED STEEL CASTINGS. THE SAME DAY THE REGION NOTIFIED MISSOURI. THE STATE DISPATCHED AN INSPECTOR ON JANUARY 26 TO SURVEY THE CASTINGS. THEY WERE CONTAMINATED.
- ON JANUARY 31 REGION III LEARNED THAT SOME OF THE CONTAMINATED CASTINGS WERE ALREADY IN TRANSIT TO FALCON PRODUCT CUSTOMERS. REGIONAL INSPECTORS VISITED FALCON PRODUCTS, DISCUSSED THE SITUATION WITH THE COMPANY'S HEALTH PHYSICS CONSULTANT AND OBTAINED LISTS OF CUSTOMERS (ABOUT 1,4000 NAMES).

WHAT WAS THE NRC RESPONSE? (CONTINUED)

- ° ON FEBRUARY 1, NRC, THROUGH STATE DEPARTMENT CABLE, OFFICIALLY OFFERED ASSISTANCE TO MEXICAN AUTHORITIES. THIS WAS IN ADDITION TO NUMEROUS OFFERS WHICH THE NRC OFFICE OF INTERNATIONAL PROGRAMS MADE INFORMALLY BY TELEPHONE TO MEXICO.
- ° ON FEBRUARY 3, THE REGIONAL ADMINISTRATOR, REGION III, FORMALLY REQUESTED THE 50 STATES TO MAKE SURVEYS OF THE CASTINGS IN EACH STATE IN ACCORDANCE WITH NRC GUIDANCE AND REPORT RESULTS TO THE APPROPRIATE NRC REGIONAL OFFICE.
- ° THE MEXICAN RADIATION SAFETY AUTHORITIES REPORTEDLY HAD FOUND AND RECOVERED 62 PELLETS FROM THE DAMAGED COBALT SOURCE IN THE STREETS OF JUAREZ. NRC RECEIVED THIS INFORMATION ON FEBRUARY 10 FROM A REGION V INSPECTOR WHO, BECAUSE OF SPECIALIZED KNOWLEDGE, HAD VISITED JUAREZ FOR TWO DAYS AT THE REQUEST OF MEXICO.
- ° ON THE SAME DATE THE SUBJECT OF FINDING THE PELLETS WAS DISCUSSED IN A CONFERENCE CALL BETWEEN THE PROGRAM OFFICES AND THE REGIONS. ALTHOUGH TEXAS HAD FOUND NO CONTAMINATION EARLIER, IT WAS DECIDED TO SEEK AN AERIAL MONITORING SERVICE (DOE) OVERFLIGHT OF EL PASO AS A PRECAUTION.

WHAT WAS THE NRC RESPONSE? (CONTINUED)

- ON FEBRUARY 9, REGION III ADVISED IE AND IP THAT POTENTIALLY CONTAMINATED CASTINGS HAD BEEN SHIPPED TO THREE FOREIGN COUNTRIES - CANADA, SINGAPORE AND THE BAHAMAS. THE THREE COUNTRIES WERE NOTIFIED THROUGH THE STATE DEPARTMENT.
- ON FEBRUARY 14, IE INFORMED FEMA OF THE SITUATION AND DISCUSSED IT WITH DOE. A MEETING WAS SET UP IN EL PASO FOR FEBRUARY 17. THE MEETING WAS CHAIRED BY TEXAS AND ATTENDEES INCLUDED REPRESENTATIVES FROM DOE, NRC, EPS, NEW MEXICO, AND MEXICO.
- ON FEBRUARY 18, AS A RESULT OF INFORMAL DISCUSSIONS BETWEEN IP AND MEXICAN OFFICIALS, IP ARRANGED FOR A MEDICAL CONSULTANT FROM OAK RIDGE TO MEET WITH ONE OF THE MEXICAN MEDICAL CONSULTANTS IN JUAREZ.
- ON FEBRUARY 23, TEXAS AND NEW MEXICO (AGREEMENT STATES) FORMALLY REQUESTED THE MONITORING FLIGHTS AND ADDITIONAL MONITORING IN THE FORM OF PORTAL MONITORS AT TWO BRIDGES BETWEEN JUAREZ AND EL PASO.

WHAT WAS THE NRC RESPONSE? (CONTINUED)

- ° PORTAL MONITORS WERE INSTALLED AND THE MONITORING FLIGHTS TOOK PLACE DURING MARCH 3 - 13. NO COBALT 60 CONTAMINATION WAS FOUND IN EL PASO OR THE ROADS LEADING INTO NEW MEXICO; THE AREAS SURVEYED.

HOW DID THE NRC REGIONS AND PROGRAM OFFICES INTERACT TO CARRY OUT NECESSARY ACTIONS?

- ON JANUARY 20 THE FOUR INVOLVED HEADQUARTERS OFFICES (IE, SP, IP, AND NMSS) MET AT THE REQUEST OF SP TO SET UP A COORDINATING GROUP TO DEAL WITH THE INCIDENT. NMSS ACCEPTED THE LEAD ROLE AT THAT POINT DUE TO THE NUMBER OF RADIATION PROTECTION POLICY QUESTIONS THAT SEEMED TO REQUIRE ANSWERS.
- WITH THE SHIFT TOWARD OPERATING ACTIVITIES BY THE FINDING THAT CONTAMINATED STEEL CASTINGS MIGHT BE WIDELY SPREAD THROUGHOUT THE U.S., THE OFFICE OF INSPECTION AND ENFORCEMENT ACCEPTED THE LEAD ON JANUARY 31.
- REGION V WAS VERY ACTIVE IN DEALING WITH THE REBAR QUESTION. REGION IV TOOK THE LEAD IN DEALINGS WITH CUSTOMS AND THE REBAR PROBLEM WITHIN THE REGION. REGION III TOOK THE LEAD ON THE CONTAMINATED TABLE CASTINGS. THE THREE REGIONAL OFFICES COORDINATED THEIR ACTIONS WITH THE HEADQUARTERS PROGRAM OFFICES. REGION V OFFERED THE SERVICES OF AN INSPECTOR WITH EXPERIENCE DEALING WITH A SIMILAR RUPTURED SOURCE TO IP FOR POSSIBLE USE IN MEXICO.

HOW DID THE NRC REGIONS AND PROGRAMS OFFICES (CONTINUED)

- ° THE OFFICE OF STATE PROGRAMS HAD FREQUENT CONTACTS WITH THE STAFF IN THE REGIONS AND KEPT ALL NRC PARTIES INFORMED OF THE LATEST DEVELOPMENTS IN ITS AREAS OF RESPONSIBILITY.

- ° THE OFFICE OF INTERNATIONAL PROGRAMS KEPT THE NRC INFORMED OF THE RESULTS OF ITS CONTACTS WITH MEXICO REGARDING INFORMATION IT HAD RECEIVED ABOUT THE INCIDENT, PROCEDURES FOR RETURN OF CONTAMINATED STEEL, AND THE OFFER OF TECHNICAL ASSISTANCE.

HOW DID NRC INTERACT WITH THE STATES,
OTHER FEDERAL AGENCIES, AND AFFECTED PRIVATE COMPANIES?

- THE AGREEMENT STATES OF TEXAS, NEW MEXICO, ARIZONA, AND CALIFORNIA WERE THE FIRST ONES INVOLVED AND KEPT THE NRC REGIONAL OFFICES (IV AND V) INFORMED OF THE RESULTS OF THEIR SURVEYS. (REBAR)
- BASED ON THE REQUEST FROM REGION III, THE 50 STATES MADE SURVEYS OF POTENTIALLY CONTAMINATED TABLE CASTINGS AND REPORTED FREQUENTLY TO THE APPROPRIATE REGIONAL OFFICE THE RESULTS OF THE SURVEYS AS THEY WERE MADE.
- THE PRINCIPAL INTERACTION WITH OTHER FEDERAL AGENCIES TOOK PLACE WITH CUSTOMS AND DOE. THERE WAS A SMALL AMOUNT OF CONTACT WITH FEMA AND EPA.
- THE PRINCIPAL CONTACT BETWEEN NRC AND PRIVATE COMPANIES INVOLVED FALCON PRODUCTS. THERE WAS DAILY CONTACT BETWEEN REGION III AND THE COMPANY AS THE SURVEYS PROGRESSED.
- THE NRC RECEIVED FULL COOPERATION AND ASSISTANCE FROM BOTH GOVERNMENTAL AND PRIVATE PARTIES INVOLVED WITH THE INCIDENT.

CURRENT STATUS

- NO TRACKING OF PELLETS FROM THE SOURCE INTO THE U.S. HAS BEEN FOUND.
- REBAR BEING SHIPPED TO EL PASO FOR TRANSFER TO MEXICO. ALL SURVEYS COMPLETED.
- FEW CUSTOMERS OF CASTINGS REMAIN TO BE SURVEYED. JOB 99% COMPLETE.
- CONTAMINATED CASTINGS WERE FOUND IN 40 STATES. IN 33 STATES ALL SUCH CASTINGS HAVE BEEN PICKED UP AND RETURNED TO FALCON DE JUAREZ IN MEXICO. IN 7 STATES THE PICKUP OF THE CASTINGS STILL IS IN PROCESS.
- FUTURE RADIATION MONITORING AT THE MEXICO - U.S. BORDER IS THE SUBJECT OF A MEETING WHICH WILL BE HELD BETWEEN HEADQUARTERS CUSTOMS REPRESENTATIVES AND THE NRC.

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PREFACE

PREFACE

When the train derailment of 10 November, 1979, caused the evacuation of the entire City of Mississauga, the Emergency and Risk Research Group at the Institute for Environmental Studies (IES), University of Toronto, was presented with a field laboratory on its own doorstep.

The Research Group is one of several interdisciplinary groups at the Institute for Environmental Studies, which bring together the skills and expertise of specialists from all parts of the University, as well as from government and the private sector. In IES, people are combined into research teams according to the nature of the problem to be studied, and for only as long as the research area warrants.

The Emergency and Risk Research Group had been studying emergency planning and response in Canada for some years, with the support of Emergency Planning Canada. One of its previous case studies of Canadian emergencies had been an earlier evacuation in Mississauga, which resulted from a Texaco oil fire in October, 1978 (Emergency and Risk Research 4: Hazen, 1979). We had also been studying emergency organisational structures and had just completed an analysis of emergency planning in Ontario (Emergency and Risk Research 3: Haussmann and Timmerman, 1979).

As a Research Group, we were therefore well prepared to respond to the Mississauga emergency. While the evacuation was in progress, our researchers made first-hand observations at the Command Post and the International Evacuation Centre. Within one week of their return home, 1,000 evacuated households received a specially designed questionnaire on their perceptions of the emergency and their part in it (Appendix 2). The resulting report attracted wide interest (Emergency and Risk Research 7: Whyte, Liverman and Wilson, 1980).

We realised that the emergency deserved a more comprehensive study, if for no other reason, than the wide international interest

in learning how 226,000 people were successfully evacuated within 24 hours. A proposal was drawn up to carry out a study of the organisational response to the emergency and the social and economic impacts of the evacuation.

The proposal, and the work presented in this report, received major support from the Ontario Ministry of the Solicitor-General. The Minister, the Honourable Roy McMurtry, played a leading role in the government response to the emergency. He also had the insight and political wisdom to see that an in-depth, non-governmental study of the events of November 10-16, 1979, would be of value to emergency planning in Canada and around the world.

Emergency planning agencies in a number of western industrial nations sent observers to the site and attended a major international conference organised by the Ontario Government in November, 1980, on Emergency Planning for the 1980's. The Emergency and Risk Research Group has continued this scientific exchange of information with similar researchers in other countries.

The Mississauga emergency has already been a major learning experience - for emergency planners, emergency response agencies, and for the people of Mississauga. It is hoped this report will add to their understanding by documenting what took place during that week in November and what the longer term costs and benefits are. The Mississauga emergency was unique. It is also part of the pattern of emergencies that can be expected in industrial societies like Canada.

MAJOR RESPONSIBILITIES

The use of a common set of field techniques and data analyses, combined with frequent project discussions, has enabled everyone in the Research Group to have input into the various components of the study. It is useful, however, in a report which covers several different topics to indicate for the reader, where the major responsibilities lie. They are:

Chapter 1.	<u>Introduction</u>	Ian Burton and Anne Whyte
Chapter 2.	<u>Event Reconstruction</u>	Peter Timmerman (with contributions from David Powell)
Chapter 3.	<u>Organisational Response: Decisions and Responsibilities</u>	Peter Timmerman
Chapter 4.	<u>Organisational Response: Meeting Community Needs</u>	David Powell
Chapter 5.	<u>Public Response to the Evacuation</u>	Anne Whyte and Joanne Wojick (with contributions from interviews by Carrie Loring and David Powell)
Chapter 6.	<u>Social Impacts</u>	Anne Whyte and Joanne Wojick (with contributions from interviews by Carrie Loring and David Powell)
Chapter 7.	<u>Economic Costs of the Evacuation</u>	Mel Kliman and Peter Victor (with statistical assistance by Joanne Wojick)
Chapter 8.	<u>Coping with Risk</u>	Ian Burton and Larry Schmidt
Chapter 9.	<u>Learning from Experience</u>	Ian Burton, Peter Victor and Anne Whyte
Appendix 1.	Design of surveys	Tim Daciuk and Anne Whyte
	7. Summary of Chi-square Tests	Anne Whyte and Joanne Wojick
	8. Emergency Operations Control Group	Peter Timmerman

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For the duration of the study we reported to an inter-departmental committee of the Ontario Government. The Committee consisted of:

Mr. David Allen	Director of Communications Ministry of the Attorney General
Mr. Allan Dickie	Director, Media Communications Ministry of the Solicitor General
Dr. Max Fitch	Director, Special Studies and Services Branch, Ministry of Labour

Mr. Harry Connolly	Field Services Officer, Ministry of Municipal Affairs and Housing
Mr. Walter Giles	Assistant Deputy Minister, Environmental Assessment and Planning, Ministry of the Environment
Dr. Robert MacBride	Program Advisor, Emergency Health Services, Ministry of Health

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Board of Education, Jim Ellison, Supervisor of Maintenance
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Chris O'Toole, Inspector
Karl Barnhart, Superintendent
Douglas K. Burrows, Chief of Police

Settlement Services, Laura Bravo
Social Services, Jim Crozier, Commissioner
Brian Johnson, Administrator

City of Mississauga

Mayor Hazel McCallion
Fire Department, Gordon Bentley, Chief
City of Mississauga, Rick Wilson, Carlton Stewart,
Len Stewart
Animal Control, Len Addison, Animal Control Supervisor
City Council, Ken Dear, Councillor (then)

Metropolitan Toronto

Ambulance Services

Fire Department

Police Department, Deputy Chief Cook

Social Services, George Coleman, Director

Senior Citizens Apartments

Emergency Planning, Ian Herbertson

Secretary to the Commissioner, Linda Walsh

Transportation Committee, Special Committee on the
Grange Inquiry, Alderman Ying Hope

Halton Region

Health Unit, Dorothy Craig, Nursing Director

George Shirton, Health Inspector

Social and Family Services, Rennie Vivian, Administrator

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Educational Organizations

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Al Brown, Principal, J.A. Turner Secondary School

H.J.A. Brown, Superintendent of Business Affairs, Peel
Board of Education (at time)

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Harley Lischman, Area Superintendent of Plant Operations,
Halton Board of Education

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Anna Bossella, Nursing Co-ordinator Psychiatry, Mississauga
General Hospital

Linda Gerger, Director, Mississauga Distress Centre

Dr. A. Toth, Erindale Medical Centre

Non-Governmental Organizations

Church Organizations and Religious Groups

-- Bai-Hai Faith, Mississauga

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Lorne Park

David A. Clarke, Director of Pathfinders, Mississauga
Seventh Day Adventists

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Church, Bramalea

Doreen Covins, Head of Ladies Auxillary, St. Anne's Roman
Catholic Church, Brampton

Rev. Alan Craig, Minister, Harrison United Church, Brampton

Rev. John Creighton, Chairperson (then), Halton Presbytery
United Church

Rev. Gerry Day, Minister, Emmanuel United Church, Bramalea

Jim Duffy, Member, St. Anne's Roman Catholic Church, Brampton

Rev. Graeme Duncan, Minister, St. Andrew's Presbyterian
Church, Brampton

Rabbi Larry Englander, Rabbi, Solel Congregation, Erin Mills

Judy Eves, President (then), Women's Association, St. Andrew's
Presbyterian Church, Streetsville

Barbara Gal, Member, St. Anne's Roman Catholic Church, Brampton

Ralph Gavert, President, Beth-El Congregation, Oakville

Rev. and Mrs. Gerber, Trinity Anglican Church, Streetsville

Rev. Derwin Hill, Minister, White Oaks Presbyterian Church,
Meadowvale

Father Andy Hutchison, Regional Dean, Mississauga Anglican
Church of Canada

-- Jewish Information Services, Toronto

Rev. Kingsley King, Minister, Dixie Presbyterian Church

Lawrence Merkley, Leader, Mormon Church, Mississauga

Ralph Merfin, Bishop of Ward, Mormon Church, Mississauga

Brad Miller, Member, Mormon Church, Mississauga

Father McCormac, Vice-Chancellor for Spiritual Affairs,
(Secretary to)

Roman Catholic Arch Diocese of Toronto

Marion Morris, Secretary, St. Bartholomew's United Church,
Brampton

Caroline Murray, President, Women's Auxillary, St. John of
the Cross Roman Catholic Church, Meadowvale

and Member of Women's Auxillary of Streetsville Minor
Hockey Association

Rev. Tom Murray, Minister, Grace United Church, Brampton

Rev. Brian Nash, Rector, St. Jame's the Apostle Anglican
Church, Brampton

Irene Parker, Executive Secretary, Hamilton Conference
Office of United Church

Noel Patterson, Recording Secretary of Session, St. Andrew's
Presbyterian Church, Streetsville

Priest, St. Patrick's Roman Catholic Church, Mississauga

Rev. Laurie Purdy, Communications Officer (then), Hamilton
Conference Office of United Church

and Member, Amateur Radio Emergency Service, Mississauga

Rita Reed, Past President, Catholic Women's League, St.
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Rev. J.G. Robinson, Minister, Glenbrooke Presbyterian
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Lesley Rothschild, Vice-President, Solel Congregation,
Erin Mills

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Mississauga

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National Office

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Mrs. Smidstra, Caretaker, Community Christian Reform Church,
Mississauga

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Rev. John Sullivan, St. Paul's United Church, Brampton

Rev. Susan Thompson, Minister, St. Bartholomew's United
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Bernie Weitzman, President, Solel Congregation, Erin Mills

Father Will, Priest, St. Mary's Roman Catholic Church,
Brampton

Community and Voluntary Organizations

The Red Cross

Ken McBride, Manager of Emergency Services, Ontario Division
Red Cross

Eileen Dockman, Executive Director, North Peel Branch Red
Cross

Arn Greene, Chairperson of Emergency Services, Oshawa
Branch Red Cross

Pam Heenan, (Current) Chairperson of Emergency Services,
Mississauga Branch Red Cross

Pearl Howell, Co-chairperson of Emergency Services, Oakville
Red Cross

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Mississauga Branch Red Cross

Helen McGrath, Chairperson of Canadian Red Cross Corps.,
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Pat Watt, Secretary, Burlington Branch Red Cross

Paul Wharram, Assistant Executive Director, Toronto Central
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Bill Wing, Chief Volunteer Co-ordinator, Mississauga Branch
Red Cross

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Harry Zwerver, President/Co-ordinator of Emergency Services,
Etobicoke Branch Red Cross

Salvation Army

Capt. Jim Ellis, Director, Erin Mills Temple

Major Ken Holbrooke, Corps Officer, Etobicoke Temple

Capt. Robert Ratcliffe, Director of Mississauga Temple

St. John Ambulance Brigade

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Brigade St. John Ambulance

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Ian Bradley, Crew Advisor, 1st Cooksville Venturers

Evelyn Chancey, Assist. Area Commissioner of Cubs, Alders
Area of Greater Toronto Region Boy Scouts

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John Lamb, Director Search and Rescue, Mississauga District
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Boy Scouts

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Service Clubs

Harry Robinson, President (then), Credit Valley Lions Club

Don Wilson, Past President, Oakville Lions Club

Hugh Vasey, Past President, Erindale Lions Club

Don Duthie, Past President, Central Lions Club

Bert Holland, Brother, Mississauga Masons

Joe Barrett, Manager of Club, Milton Optimists

Fred Ahrens, President, Brampton/Bramalea Optimists

Bill Dyche, President, Mississauga Optimists

Bud Todd, Secretary, Port Credit Rotary Club

Danny Crymble, Director, Streetsville Rotary Club

David Wilcox, Secretary, Streetsville Rotary Club

Jim Lewis, Secretary, Mississauga Rotary Club

Ron Yates, President (then), Bramalea Rotary Club

Al Brown, President, Brampton Rotary Club

Jim Kenefick, President, Brampton-South Rotary Club

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Bob Holmes, Member, Streetsville Kinsmen
Rick Hoar, President, Bramalea Kinsmen
Al Pettit, President (then), Bramalea Kinsmen
Peter Mehanie, President (then), Brampton Kinsmen
Colin Murray, President, Mississauga Kinsmen
-- Mississauga Valley Community Center
Ted Browse, President, Civitan
Jack McChesney, President, Brampton J.C.'s
Ron Hart, Past President, Brampton J.C.'s
Wayne Haviland, Past President (then), Mississauga J.C.'s
Don Clark, President, Peel Shrine
Hab Lowe, President (then), Mississauga Shrine
-- Variety Club, Toronto
Wanda Parrish, Ladies Auxillary, Brampton Legion
Herbert Spence, Bar Stewart, Brampton Legion
Andre Donato, Secretary, Clarkson Kiwanis
Terry Owen, President, Brampton Kiwanis
Harrison Irvine, Secretary, Dixie Kiwanis
James Benn, President, Brampton Council Knights of Columbus
Paul Walters, Member, Oakville Council Knights of Columbus
Barry Kay, Deputy Grand Knight, Oakville Council Knights
of Columbus
Rick Beaulieu, Brother, Oakville Council Knights of Columbus
Fred Barrett, President (then), Streetsville Lions Club
Paul March, President, Bramalea Lions Club
Les Coles, President (then), Bramalea Lions Club
John Powell, Past President, Malton Airport Lions Club
Mr. Semeniuk, Past President, Cawthra Lions Club
Helmut Loewen, President (then), Dixie Lions Club
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Order of Nurses

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Military Training Organizations

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Air Cadets Corps., Mississauga

Capt. Armand Chateau-Vert, Commanding Officer, 540 Squadron
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Major Don Lee-Thompson, Commanding Officer, 758 Argus Squadron,
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Capt. Norman Harris, Commanding Officer, 105 Royal Canadian
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Army Cadets Corps., Oakville

Major Jack Dickens, Commanding Officer, 440 Royal Canadian
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Capt. Fred Hawkins, Commanding Officer, 557 Royal Canadian
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Nursing Homes

Carmel Heights Home for the Aged, Sister Mary Rita,
Administrator

Chelsey Park I Nursing Home, Mrs. Rowe, Administrator

Erin Mills Lodge Retirement Home, Betty Slocum, Administrator

Mississauga Extendicare Nursing Home, Mrs. Carson, Director
of Care

Oakville Extendicare Nursing Home, Mrs. Cunliffe, Administrator

Peel Manor Home for the Aged, Jean Duffy, Health Care Aid

The Pines Home for the Aged, Christine Stewart, Administrator

Taara Nursing Home, Mrs. Bajin, Owner

Sheridan Villa Home for the Aged, Roger Maloney, Administrator
and Linda Instance, Assistant Administrator

Tyndall Nursing Home, Nancy Roger, Director of Nursing

Trade Unions

George Hicks, Financial Secretary, 707 Galaxy Club of
Local 707 U.A.W.

Victor Darling, Human Rights Chairperson, 707 Galaxy Club
of Local 707 U.A.W.

Medical Doctors

Dr. E. Rix, General Practitioner

Dr. H.L. Levy, Respiratory Specialist, Mississauga General
Hospital

Dr. Peter Strachan, Paediatrician

Dr. Michael Lester, Paediatrician

Dr. Andrew Sarne, Chief of Emergency Physicians (then),
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Dr. Tom Lofft, Child Psychiatrist

Dr. Alexander Borgiel, Chief of Family Practice (then),
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Maxine Kelly, General Manager, Sheridan Mall Shopping Centre

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The Dow Chemical Company -

Len Weldon, Vice-President

Stuart Greenwood

Fred Hamlin

Ron Johnson

Bill Johnston, Administrator,

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