

NEWS RELEASE / COMMUNIQUÉ



Emergency Preparedness
Canada

Protection civile
Canada

Date: November 18, 1987.

Release: Immediate

COMMITTEE TO CO-ORDINATE GOVERNMENT-INDUSTRY ACTION ON MAJOR INDUSTRIAL ACCIDENTS

Ottawa -- Representatives from industry, government and public interest groups will meet at the Skyline Hotel in Ottawa, November 19-20, at 9:00 a.m., to discuss how to better co-ordinate actions to prevent and respond to major industrial accidents.

This will be the first meeting of the Major Industrial Accidents Co-ordinating Committee (MIACC). The committee will develop objectives and terms of reference to more effectively protect communities from major industrial accidents. The committee is the latest in a series of government-industry initiatives aimed at developing better prevention and response programs.

.../2

The idea for MIACC stemmed from the federal government's response to the Bhopal tragedy. In 1984, a government-industry task force was set up to examine the possibility of such an accident occurring in Canada.

A slate of senior government and industry speakers has been invited, including Patrick Lagadec, an international authority on major industrial accidents from the Ecole Polytechnique de Paris, France.

For further information, please contact:

Joan Borsu
Emergency Preparedness Canada
992-3322

Wayne Bissett
Environment Canada
953-1131

Michael Salib
Transport Canada
990-1132

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MIACC NEWSLETTER

Volume 1, No 1, January 18, 1988

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The first MIACC conference was held in Ottawa on November 19 & 20, 1987 and was attended by more than 70 persons from across Canada, with guests from France and the USA. Taking into consideration the consensus areas reached during the Workshop sessions of the Conference, the following actions have been taken:

- 1- A new Steering Committee (SC) has been formed and its composition is shown in attachment # 1. Subgroups will probably be established to examine specific subjects and these subgroups could include representation beyond that of the S.C. members.
- 2- The S.C. held its first meeting on January 5, 1988. During the first year, the SC will be co-chaired on a rotational basis by representatives from the 3 federal departments.
- 3- The 3 federal departments agreed to provide a secretariat from within existing resources for the first year of MIACC.
- 4- The Objective and Terms of Reference have been modified as per recommendations made by the Workshop groups at the Conference (attachment # 2).
- 5- MIACC's name was discussed at length by the SC and no suitable alternative has yet been found. However, the S.C. was satisfied that the changes made to the OBJECTIVE represent clearly the scope of MIACC.
- 6- The SC tasked the Secretariat with the following activities:
 - a) develop a suitable "Scope" paragraph to be part of the MIACC paper on Objective and Terms of Reference.
 - b) consider other federal/ provincial/ industry/ non government organizations inter-relationships as potential models for MIACC operation.
 - c) secure participation of an environmental interest group to SC.
 - d) solicit "input to the follow-up report" to establish and maintain an inventory of existing and planned activities related to the implementation of the Bhopal report recommendations.
 - e) Identify areas of concern and suggest a work plan to address the situation.

- 7- Attendees to the first MIACC Conference received within the MIACC folder a report entitled "Input to Follow-Up Report" in which they are requested to input existing and planned programs and activities related to the recommendations of the report " Bhopal Aftermath Review: An Assessment of the Canadian Situation". Returns from across Canada will form the inventory (Term of Reference # 4) and based on its review, the S.C. will formulate an action plan to fill the gaps (Terms of Reference # 1). Your input is critical to the successful operation of MIACC. As such, will you please complete this important document as soon as possible, and return it to Mr. R. Morcos, whose address is shown inside that report, (he can be reached at (819)953-1137).
- 8- The S.C. thanks all who attended the November Conference for their support. Through Newsletters, such as this, the S.C. hopes to reach persons, organizations, industry and governments who are interested in the subject of major accidents involving dangerous substances.
- 9- The next MIACC NEWSLETTER will include a listing of Canadian Newsletters which might be of interest to you, as well as Canadian and international conferences and seminars. The S.C. encourages you to communicate to us any information pertinent to this item (including local newsletters) which could be published or referenced

MIACC Steering Committee
MIACC NEWSLETTER
c/o CID/IPB/Environment Canada, Ottawa, K1A 0H3
(819)953-1137

M I A C C

STEERING COMMITTEE MEMBERS

	Name	Telephone	Agency
*	E.L. Shipley	613-992-2727	EMERGENCY PREPAREDNESS CANADA
*	P.M. Higgins	819-997-1298	ENVIRONMENT CANADA
*	J. Read	613-998-1147	TRANSPORT CANADA
	P. Brien	418-643-3256	BUREAU DE LA PROTECTION CIVILE DU QUEBEC
	M. Hegan	306-787-9563	SASKATCHEWAN EMERGENCY MEASURES ORGANIZATI
	M. Egner	403-451-7107	ALBERTA PUBLIC SAFETY SERVICES
	D.N. Cassidy	613-233-1106	CANADIAN ASSOCIATION OF CHIEFS OF POLICE
	E. Therien	613-749-3825	CANADIAN ASSOCIATION OF FIRE CHIEFS
	C. Johnson	519-736-2111	CANADIAN CHEMICAL PRODUCERS' ASSOCIATION
	J. Dillon	613-233-8423	CANADIAN MANUFACTURERS' ASSOCIATION
	L.P. Tardif	613-236-9426	CANADIAN TRUCKING ASSOCIATION
	S. Tom	613-236-9426	FEDERATION OF CANADIAN MUNICIPALITIES
	J. Shortreed	519-885-1211	-3377 INSTITUTE FOR RISK RESEARCH - UNIVERSITY OF WATERLOO
	J. Reed	416-441-7673	PETROLEUM ASSOCIATION FOR THE CONSERVATION OF THE CANADIAN ENVIRONMENT

Co-Chairman

December 23, 1987

MAJOR INDUSTRIAL ACCIDENTS

COORDINATING COMMITTEE

M I A C C

OBJECTIVE

TO PROVIDE, FOR ALL INTERESTED PARTIES, A FOCUS FOR ACTIONS AND LEADERSHIP TO REDUCE MAJOR ACCIDENTS INVOLVING DANGEROUS SUBSTANCES IN TERMS OF NUMBER AND SEVERITY AS THEY IMPACT ON PUBLIC SAFETY, HEALTH AND THE ENVIRONMENT, BY IMPROVING PREVENTION PREPAREDNESS AND RESPONSE PROGRAMS.

TERMS OF REFERENCE

MIACC WILL :

1. REVIEW ACTIVITIES, PROMOTE STRATEGIES AND RESEARCH, BY ACTIVELY SEEKING COMMITMENT FROM ALL PARTICIPANTS AND BY MONITORING PROGRESS TOWARDS THE ACHIEVEMENT OF THE OBJECTIVE.
2. HAVE A COORDINATING ROLE AMONGST INTERESTED GROUPS.
3. PROVIDE A FORUM FOR INFORMATION EXCHANGE ON PROGRAMS AND ACTIVITIES RELATED TO MAJOR ACCIDENTS THROUGH NEWSLETTERS AND OTHER COMMUNICATIONS.
4. ESTABLISH AND MAINTAIN AN INVENTORY OF EXISTING AND PLANNED ACTIVITIES RELATED TO ACHIEVING THE OBJECTIVE.

As adopted by the Steering Committee
January 5, 1988

**MAJOR INDUSTRIAL ACCIDENTS
COORDINATING COMMITTEE
M I A C C**

AGENDA

19-20 November, 1987

Skyline Hotel, Ottawa

November 19	Plenary Session : "Ballroom C" (2nd floor)	
8:00- 9:00	Registration	
9:00- 9:10	Welcome and Introduction	P.Budzik Moderator
9:10- 9:40	Government perspective on Major Industrial Accidents	P.Browes, MP Parliamentary Secretary to the Minister of the Environment
9:40-10:10	Industry perspective on Major Industrial Accidents	J. Walsh V.P. DuPont Canada
10:10-10:30	Refreshments break	
10:30-11:10	Major Industrial Accidents: "Overview of the Canadian scene"	P.Brien (BPCQ) M.Egener (APSS)
11:10-12:00	International Perspective on Major Industrial Accidents	P. Lagadec
12:00-13:15	Lunch : Richelieu Room; speaker:	J. Read, DG TDG- TC
Afternoon	Plenary Session: "Ballroom C"	
13:15-13:30	Introduction to Workshop Sessions: "From Bhopal to MIACC"	P. Budzik
13:30-13:45	Commentary on Structure of Workshop: The participants will be assigned to specific working groups. Each group will be tasked to consider: -the objective and terms of reference of MIACC -the role and composition of MIACC's steering committee.	P. Budzik

**Comite de coordination
des
accidents industriels majeurs
M I A C C**

ORDRE DU JOUR

19-20 novembre, 1987

Hotel Skyline, Ottawa

Le 19 novembre Session pleniere : "Ballroom C"

8:30- 9:00	Inscription	
9:00- 9:10	Bienvenue et introduction	P.Budzik animateur
9:10- 9:40	La perspective du gouvernement vis-a-vis les accidents industriels majeurs	P. Browes, Deputee Secrtaire parlementaire au Ministre de l'environnement
9:40-10:10	La perspective de l'industrie vis-a-vis les accidents industriels majeurs	J. Walsh V.P. DuPont Canada
10:10-10:30	Rafrachissements	
10:30-11:10	Sommaire de la situation au Canada vs les accidents ind. majeurs	P.Brien (BPCQ) M.Egener (APSS)
11:10-12:00	Perspective internationale	P. Lagadec
12:00-13:15	Diner: salle Richelieu; invite:	J. Read, DG TMD- TC

L'apres midi: Session pleniere : Ballroom C

13:15-13:30	Introduction aux ateliers: "De Bhopal a MIACC"	P. Budzik
13:30-13:45	Commentaires sur le fonctionnement des ateliers: Chaque participant sera affecte a un groupe qui aura a examiner: -l'objectif et les responsabilites de MIACC -le role et la composition d'un comite de direction de MIACC. Un animateur et une personne ressource seront affectes a chaque groupe. Le rapporteur presentera un rapport des discussions a la session pleniere le 20 novembre.	P. Budzik

The groups will be assigned a discussion facilitator, a resource person and a rapporteur who will present a consensus report to the plenary session of the following day.

13:45-16:15

WORKSHOPS :

W#	Colour Name Tag	Room	Animateurs	Rapporteurs	Resource persons
1	RED	Ballroom C	L. Whitby	P. Doyle	P. Brien , J. Reed
2	BLUE	Ballroom C	G. Lafond	R. Lutz	D.W. Bissett, C. Johnson
3	GREEN	Carleton	C.A. Lachance	P. Potter	G. Riley , F. Van Zeggeren
4	YELLOW	Confederation	J. Code	J. Ellard	M. Egner, M. Salib

16:15-16:30	Moderator's concluding remarks	P. Budzik
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17:00-19:00	Reception with cashbar: Richelieu Room
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November 20 Plenary Session: Ballroom C

9:00- 9:05	Moderator's introductory remarks	P. Budzik
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9:05-10:05	Review of output from working session	Rapporteurs
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10:05-10:30	Refreshments
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10:30-11-15	Discussion and consensus building on working groups output.	P. Budzik
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11:15-11:30	Moderator's summary and concluding remarks.	P. Budzik
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11:30-12:00	Closing Statement.	W.B. Snarr Exec. Dir. EPC
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BPCQ = Bureau de la protection civile du Quebec
APSS = Alberta Public Safety Services
TDG-TC = Transport of Dangerous Goods- Transport Canada
EPC = Emergency Preparedness Canada

13:45-16:15

ATELIERS

A #	Couleur de l'etiquette	Salle	Animateurs	Rapporteurs	Personnes ressource
1	rouge	Ballroom C	L. Whitby	P. Doyle	P. Brien, J. Reed
2	bleue	Ballroom C	G. Lafond	R. Lutz	D.W.Bissett, C. Johnson
3	verte	Carleton	C.A.Lachance	P. Potter	G. Riley, P. Van Zeggeren
4	jaune	Confederation	J. Code	J. Ellard	M. Egener, M. Salib

16:15-16:30 Commentaires de l'animateur P. Budzik

17:00-19:00 Reception avec bar payant,
a la salle Richelieu

Le 20 novembre Session pleniére: Ballroom C

9:00-9:05 Introduction de l'animateur P. Budzik

9:05-10:05 Examen du travail des ateliers Rapporteurs

10:05-10:30 Rafrachissements

10:30-11-15 Discussions et accord sur les
rapports des ateliers.

11:15-11:30 Resume et conclusions P. Budzik

11:30-12:00 Discours de cloture. W.B. Snarr
Dir. Exec. PCC

BPCQ = Bureau de la protection civile du Quebec

APSS = Alberta Public Safety Services

PCC = Protection Civile du Canada

TMD-TC = Transport des matieres dangereuses- Transport Canada

Appendix 10 A

Different municipalities in Québec, have integrated specific courses related to DG in the Fire Fighters' curriculum. BPCQ has assisted in the training of new fire fighters at the Arnprior Training Center.

Appendix 11-E

M U P E M s Mandate

MESURE D'URGENCE POUR L'EST DE MONTREAL

CONTINGENCY PLANS FOR MONTREAL EAST

Description To coordinate municipal and industrial emergency measures plans related to potential chemical accidents which can affect the well being of the public or could cause material damages.

Objectives

- .Carry out risk analysis for potential accidents involving dangerous materials.
- .Identify all responders which could contribute and make sure of their collaboration.
- .Coordinate a uniform warning system for the responders and the public.
- .Develop communication procedures to the public in case of an accident.
- .Coordination of blocking main traffic arteries
- .Coordination of public evacuation plan
- .Insure a rapid and efficient response by encouraging better communication between responders.
- .Promote a better coordination of responders resources.

MUPEM's task is long and difficult due to the large number of agencies involved in this project: risk generating industries, cities, government departments and other.

Note: With the assistance of the APQ, CCPA, the cities of Montreal, Anjou and Montreal East, BPC2 managed to convince his partners (including 27 industries) of the necessity to establish a coordinating committee which will deal with issues related to hazardous materials, in Montreal East. This example of cooperation is known as MUPEM, similar initiatives are being established at Bécancour and Trois Rivières.

Appendix 12

Presently, there are no special dangerous goods routes in Québec; however Transport of DG is not allowed on some roads :Autoroute Ville-Marie, Tunnel Louis-Hippolyte-Lafontaine and on roads close to the metro in Montreal.

APPENDIX 13

A. ORGANIZATIONS SUPPORTING CAER:

Canadian Adhesives and Sealants Association
Canadian Manufacturers of Chemical Specialties Association
Canadian Paint and Coatings Association
Crop Protection Institute
Federation of Canadian Municipalities
Petroleum Association for the Conservation of the Canadian Environment
Rubber Association of Canada
Society of Plastics Industries

Appendix 14-c

Alberta Public Safety Services (APSS)

A cost shared equipment program, in which the province contributed dollar for dollar to a limit of \$2500 for any one project has been in place since 1979 (\$100,000 annually). Deferred for 1 year. The program was open for all emergency equipment, however budget limits restricted purchases to mainly communications equipment.

APSS is studying an expanded program, open to all emergency equipment, utilizing municipal-provincial-federal (JEPP) funding on a cost shared basis.

APSS conducted a survey in which municipalities were given the chance to suggest items they may need to deal with in an emergency. APSS distributes 21 rescue kits per year to municipalities (145 to date). It consists of basic rescue equipment only (generators, lights, hydraulic extraction, stretchers, jacks, etc) but proves to be quite useful in the smaller communities.

Each municipality maintains a resource list of emergency response equipment. All municipalities also have Mutual Aid Agreements in place with neighbouring communities on whom they can call for equipment and manpower in the event an incident is beyond their own capability to manage the response. APSS can assist beyond this point if required.

For a major chemical accident, the first concern is to save lives by getting the warning out. Warning systems (call-out) are part of each Peacetime Emergency Operations Plan. In addition to specific site warning systems agreements with radio and TV stations are utilized to warn the general public.

Industry and local levels of government in the Fort-Saskatchewan/ Edmonton Strathcona refinery/chemical complex are responding positively in this area. The Canadian Chemical producers' Association (CCPA) in conjunction with Community Awareness and Emergency Response (CAER) are very active in the Ft-Saskatchewan area (Ft-Map) and Strathcona Industrial Association (SIA). The two groups work together, and have pooled resources to develop plans that address chemical incidents/ accidents.

Appendix 15

APQ: Association Petroliere du Québec or Quebec Petroleum Association

APQ members:

- Esso Petroleum Canada
- Petro Canada
- Shell Canada Ltee
- Sunoco Inc.
- Texaco Canada Inc.
- Ultramar Canada Inc.

APQ associate members:

- Groupe petrolier Olco Inc.
- Petroles Calex Ltee
- Sergaz Inc.
- Sonic Cooperative federee du Québec

Appendix 1a

REGULATIONS CONCERNING DANGEROUS GOODS AND TOXIC SUBSTANCES

IN QUEBEC

The following list of regulations, acts and manifest represents the legislative aspect of Transport of Dangerous Goods in Québec.

- *Transport of Dangerous Goods Act (Transport Québec)
- *Solid Wastes Regulations (Environnement Québec)
- *Environmental Quality Act (Environnement Québec)
- *Transport of Wastes Regulations (Transport Québec)
- *Environmental Impact Assessment Regulations (Environnement Québec)
- *Air Quality Regulations (Environnement Québec)
- *Sewer Discharge Regulations (Municipal Affairs)
- *Drinking Water Regulations (Environnement Québec)
- *Wastewater Treatment in Rural Areas (Environnement Québec)
- *Water Pollution Control Regulations from Livestock Activities (Environnement Québec)
- *Act Controlling Trade of Petroleum Products (EMR)
- *Labour Safety and Health Act (C.S.S.T.)

Other regulations concerning such issues as explosives (Sûreté du Québec), Radio-Active Materials (AECB) and storage of flammable materials (municipalities) were also adopted during the last few years in Québec.

NOTE: The Québec regulations regarding TDG is similar to the Transport Canada TDG regulations, this is an example of collaboration between the federal and provincial governments and the concerned industries.

Appendix 18

Community Health Centers, in Québec, deal with health emergencies, and these are well defined across the Province.
An Antipoison Center can be reached through telephone lines, in Québec.
Expert advice, related to Hazardous Materials, can also be obtained from a Toxicology Center.

Appendix 20

20.1 Institute for Risk Research (IRR), Engg.2, Univ of Waterloo, Waterloo ONT N2L 2G1

CURRENT RESEARCH PROJECTS:

A proposed Research Agenda for Incorporating Risk Analysis in Environmental and Social Impact Assessments
Risk Analysis/Risk Assessment Methodology for Labour Canada's Occupational Safety and Health Program.
Drinking water, standards and Risk Assessment
The Transportation of Dangerous Commodities : A Provincial Perspective
Assessing the Risks of Transporting Dangerous Goods by Truck and rail

CURRENT AND FORTHCOMING PUBLICATIONS:

Energy alternatives: Benefits and Risks, H.D. Sharma 1987
Environmental Health Risks: Assessment and Management, R.S. McColl 1987
Reliability and Risk Analysis in Civil Engineering, N.C. Lind 1987: Fifth International Conference on Applications of
Statistics and Probability in Soil and Structural Engineering (1 set= 2 volumes for \$140.00)
Risk Management for Dangerous Goods, J.H. Shortreed 1987
IRR NEWSLETTER (519)855-1211, ext:6815

Abbreviations

APQ	Association Pétrolière du Québec	Québec Petroleum Association
APSS	Alberta Public Safety Services	Services de Sécurité Publique de l'Alberta
BPCQ	Bureau de la Protection Civile du Québec	Québec Emergency Measures Organization
CAER	Community Awareness and Emergency Response	Sensibilisation du Public/ Intervention d'urgence
CANUTEC	Canadian Transport Emergency Center	Centre d'urgence transport du Canada
CCPA	Canadian Chemical Producers' Association	Association des fabricants de produits chimiques Canadiens
CFM	Canadian Federation of Municipalities	Fédération Canadienne des Municipalités
CHLOREP		
CHUL	Centre hospitalier de l'université Laval	Laval University Medical Center
CPA	Canadian Petroleum Association	Association pétrolière Canadienne
CRSS	Centre régional de santé et de service sociaux	Regional Center for Health and Social Services
CSST	Commission de la santé et sécurité au travail	
CVECO	Chemical Valley Emergency Control Organization	Organisation d'urgence de la vallée chimique
DOE	Department of Environment (Environment Canada)	Environnement Canada
EHO	Emergency Measures Organization	Bureau de la protection civile
EPC	Emergency Preparedness Canada	Protection civile du Canada
EPO	Emergency Preparedness Ontario	Protection civile de l'Ontario
ERP	Emergency Response Plans	Plans d'intervention d'urgence
IRR	Institute of Risk Research, Waterloo Univ.	Institut de recherches sur les Risques, Univ. Waterloo
MMH	Ministère des affaires municipales	Dept. of Municipal Affairs
MEHQIQ	Ministère de l'environnement du Québec	Environnement Québec
MEHQ	Ministère de l'énergie et ressources du Québec	Québec Energy, Mines & Resources
MOE	Ministry of Environment (Ontario)	Environnement Ontario
LIS	Lambton Industrial Society	Société industrielle de Lambton (Sarnia)
NATES	National Analysis of Trends in Emergencies System	
PRCE	Petroleum Association for the Conservation of the Canadian Environment	Association pétrolière pour la conservation de l'environnement canadien
SAC	Spills Action Center	Centre des déversements
SIPUM	Système informatisé de planification d'urgence municipale	Database for planning municipal emergencies
TDG	Transport of Dangerous Goods	Transport de matières dangereuses
TEAP	Transport Emergency Assistance Plan	Plan d'aide en cas d'urgence transport
WHHS	Workplace Hazardous Material Information System	Système d'information pour les MD en lieu de travail

Appendix 22 (Cont.)

	Address	Telephone
APU		
APSS	10320-146 Str., Edmonton, AB	(403)451-7107
BFCQ	1200 route de l'Eglise, Ste-Foy, Que. G1V 4H1	(418)643-3256
CAER		
CANJTEC		
CCPH	805-350 Sparks Str., Ottawa, Ont., K1R 7S8	(613)996-6666
CFM	24 Clarence str., Ottawa, Ont., K1N 5P3	(613)237-6715
LHLUREP		(613)237-5221
CHUL		room 18
CPH		
CRSSS		
CSST		(418)529-5311
CVECO		
DOE	351 St-Joseph Blvd, Ottawa, Ont. K1A 0H3	(613)953 1131
FMO		
EPC	141 Laurier Ave. West, Ottawa, Ont. K1A 0M6	(613)993-6890
EPU	25 Grosvenor str., 1st fl, Toronto M7H 1Y6	(416)965-6708
ERP		
IKR		(519)885-1211-3355
HAM		
MENVIQ	3900 rue Marly, Ste-Foy, Qué	(418)643-8843
NERQ		
MGE		
LIS	265 N. Front Str., Sarnia, Ont. N7T 7X1	(519)344-2412
NATES		
PACE	1202 - 275 Sparks str., Ottawa, ,	(613)236-9122
SAC	MGE, Toronto	1(800)268-6060
SIPUM		
TDG		
TEAP		
WHMIS		

9 20.1	AGENCIES	PROGRAMS	S CONTACT
	Institute for Risk Research, Univ. of Waterloo, (SEE APP. 20.1) Quebec Univ...Trois Rivieres	Ont Risk Communication Symposium, Dec 1.2. 1987 Que Master in Safety and Industrial Health	P John Shortreed (519)885-1211 Ext: 3355 E Rene Rochette (819)376-501

R: RECOMMENDATION; S:STATUS, PLEASE INDICATE : EXISTING: E, PLANNED: P + DATE

"Right-to-Know" Legislation

Conclusion 21

The Steering Committee received comments from several interested parties suggesting that this "Bhopal Review" should more specifically address the issue of "right-to-know". The comments ranged from the immediate need for legislation at the provincial and/or federal level in this area to the reliance on voluntary sharing of information with those public officials who need and can use the data, to the attitude that "the public would not know what to do with the information anyway".

The Steering Committee was not able to identify any existing legislation under which the federal government could act. We are aware of some of the initiatives in the United States, as well as the City of Vancouver Dangerous Goods By-Law and legislation proposed by several municipalities such as the City of Toronto. While we respect the concern that development of differing legislative requirements at the municipal level could possibly be burdensome to industry and that therefore senior governments should take the initiative, the Steering Committee concludes that, due to legal and constitutional concerns, the issue needs further study.

Recommendation 21

The issue of "right-to-know" with all its various facets should be examined in a separate study involving governments (at all levels), industry and representatives of environmental and public interest groups.

R AGENCIES

21

BPCB

PROGRAMS

S CONTACT

Qué Distribution of risk maps to different regions P Roland Gosselin (416)643-3256
to create centers of expertise re: prevention and
response to specific risks.

R: RECOMMENDATION; S:STATUS, PLEASE INDICATE : EXISTING: E, PLANNED: P + DATE

Appendix 1-B

In Québec, the Act mandating the BPCQ protects the public in case of emergencies, it requires that each municipality has its own emergency response plan.

Out of the Québec 1500 municipalities, some 1109 have emergency plans.

APPENDIX 2.4

ENVIRONMENT CANADA

Ottawa	Publications	(613) 997-3406
Atlantic Region,	Charlottetown, N.S.	(902) 426-2576
Québec Region,	Montreal, Qué.	(514) 283-6418
Ontario Region,	Toronto, Ont.	(416) 973-1073
Western & Northern Region,	Edmonton, Alb.	(403) 468-8020
Pacific & Yukon Region,	Vancouver, B.C.	(604) 666-0370

Appendix 5

BPCC is putting together all information related to dangerous materials for planning and dissemination purposes, through risk maps and computerized data base which contains among other items the Québec hazardous wastes disposal sites.

In this context the word Toxic Dump was used because it was a short word meaning here "Hazardous Wastes Disposal Sites" (HMDS); these include disposal sites as such, dumps, waste farming, lagoons, sludge disposal sites, etc.

To complete the data base which include the name, the owner, the address, the nature and source of the wastes and their potential impact on each of the HMDS inventorized, we used the HMDS inventory prepared in June 86 by the Ministère de l'Environnement du Québec, Hazardous Wastes Division. This inventory was based on the one prepared in 1984 by SERLEC (Groupe d'étude et de restauration des lieux d'élimination des déchets dangereux : HMDS Study and Restoration Group) and included modifications resulting from studies and research carried out during 1985 and the 1st quarter of 1986.

The inventorized dumps were categorized in one of the following categories:

- *Category I: Site representing a risk to public health &/or a high risk to the environment.
- *Category II: Site representing a low risk to public health &/or an average risk to the environment.
- *Category III: Site representing a low risk to the environment but no risk to public health.

The criteria used to categorize the HMDS according to the potential risk they represent are the following:

- *nature et quantity of wastes
- *capacity of the site
- *risk of contamination of drinking water
- *risk of direct contamination of the public (dust, gases,...)
- *risk of contamination of food chain
- *risk of contamination of ecosystem and natural environment.

According to these criteria, the HMDS in Québec were identified:

- category I: 66 sites
 - category II: 98 sites
 - category III: 160 sites,
- for a total of 324 HMDS out of 1086 sites inventorized.

Appendix-E (cont.)

TOXIC DUMPS
(March 1987)

Administrative Regions	Catégory			Inventorized
	I	II	III	
01 Bas St-Laurent, Gaspésie Iles-de-la-Madelaine	1	4	5	10
02 Saguenay, Lac St-Jean	5	4	13	22
03 Québec	1	7	25	33
04 Mauricie-Bois- Francs	6	5	20	31
05 Estrie	3	6	4	13
06 Montréal (périphérie + îles)	13	38	58	109
07 Outaouais	2	6	5	13
08 Abitibi- Témiscamingue	30	23	26	79
09 Côte-Nord	5	5	3	13
10 Nouveau-Québec	0	0	1	1

Appendix-6 A

Alberta's contingency planning starts with a generic provincial peacetime emergency operation plan and is supplemented by Hazard specific plans i.e. Emergency plan for a sour gas release, support plan for search operations, Foreign animal diseases eradication support plan, etc.

AGENCIES	PROGRAMS	CONTACT
A)		
Plants in Montreal-East & Beaudouin	Que Develop a new contingency plan	E
LIS Sarnia,	ON Develop a new contingency plan	E Don Dukes
DuPont Maitland,	ON Develop a new contingency plan	E John Meyers
Union Carbide Prentiss,	AB Develop a new contingency plan with APSS	E Robert Seath
APSS (Appendix-6a)	AB Municip have ERP based on hazard analysis	E F.T. Nesbitt (403)451-7143
6 B)		
BPCQ	Qué Develop contingency plans	E Roland Gosselin (418)643-3256
Manitoba Environment	MA Environmental Accident Response	E Dave Ediger (204)945-7042
Manitoba EMD	MA Co-ordination of Planning	E Henry Eckert (204)945-4789
APSS	AB APSS provide assistance re: planning, to ind, munic.	E R. Willhauk (403)451-7119
6 C)		
Quebec Trucking Association	Qué Documentation & courses on Hazardous Materials	E Brigitte Lague 1(800)361-5813
Manitoba Environment	MA Transportation & Handling of D.G.	E Edwin Yee (204)945-7039
6 D)		
Manitoba Environment	MA Transportation & Handling of D.G.	E Edwin Yee (204)945-7039
APSS	AB APSS, CN & CP have procedures to exchange info	
APSS	AB rapidly in case of emergencies.	
6 E)		
Canadian Coast Guard, St-John	NB With Prov., re: training, exercises, procedures,	E (506)648-4714
Manitoba Environment	MA Environmental Accident Response	E Dave Ediger (204)945-7042
Manitoba EMD	MA	E (204)945-4772

R: RECOMMENDATION; S:STATUS, PLEASE INDICATE ; EXISTING: E, PLANNED: P + DATE

Spill Reporting and Analysis

Conclusion 7

Reporting of spills as required by the Transportation of Dangerous Goods Regulations is providing an extensive data base on transportation related accidents. The National Analysis of Trends in Emergencies System (NATES) was designed to compile and analyze information on spills from all sources. However, the reporting of plant-site releases, is not consistent amongst provinces; the information is also voluntarily supplied to NATES by the provinces. As transportation sector reporting is mandatory and the other sectors are not, there are consequent gaps and inconsistencies of information in the data base.

Recommendation 7

As the data base for plant-site releases should parallel the activity for transportation incidents:

- (a) Legislation requiring the reporting of spills/releases from non-transport accidents to a particular government agency on a mandatory basis should be examined. (Federal: E, T; Provincial: E, T)
- (b) Government agencies should re-examine the NATES program and the level of resources necessary to maintain and improve the system. (Federal: E, T; Provincial: E, T)

R	AGENCIES	PROGRAMS	S	CONTACT
7 A	Dept Munic Affairs & Env.	NB Clean Environment Act	E	(506)453-2669
		Pesticides Control Act	E	(506)453-2861
	CSST,	Qué Dangerous Goods Regulations: identification, handling, storage of dangerous goods in plants and other working places.	E	J-Pierre Elsiger (418)643-0671
	Environnement Québec	Qué Dangerous Goods Manifest	E	Conrad Anctil (418)644-3420
	Ministere des Transports	Qué Reglements TMD code securité routière 479	E	André Ares (418)643-2235
	Ministry of Environment	Ont Reports of spills pursuant to the Ontario Water Resources Act, the Env. Protection Act and		
	Ministry of Environment	Ont Pesticides Act should be made to SAC	E	Gary Zikovitz 1-800-268-6060
	Manitoba Environment	MA Transportation & Handling of D.G.	E	Edwin Yee (204)945-7039
	APSS	AB APSS operates a 24 hr DG compliance center	E	1-900-272-9600// 463-422-9600

7 B)

Manitoba Environment	MA Environmental Accident Response	E	Dave Ediger	(204)945-7042
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R: RECOMMENDATION; S: STATUS, PLEASE INDICATE : EXISTING: E, PLANNED: P + DATE

Using Contaminant Levels for Planning Evacuations

Conclusion 8

In developing emergency response plans, the concentration levels of chemicals in the ambient air at which public evacuation or public protection measures should be initiated needs to be established. The oil and gas production sector has been able to arrive at ambient air concentration levels of hydrogen sulphide above which evacuation must take place. No similar levels have been identified for other hazardous chemicals.

Recommendation 8

- (a) A government/industry/public sector study group should be formed to determine the concentrations of hazardous chemicals in the ambient air at which public protection procedures should be initiated. (Federal: P, H, E; Provincial: P, H, E; Municipalities; Industry)
- (b) In the case of transportation accidents involving a spill, information should be available on-scene as to the hazards associated with the substance and the public protection measures that should be initiated. (Federal: T; Provincial: P, T; Industry)

R	AGENCIES	PROGRAMS	S	CONTACT
8 A	Environment Canada	Envirotips	E	Environ. Canada (Appendix 24)
	CHUL	Qué Toxicology Centre	E	Dr. Albert Nantel (418) 654-2254
	Manitoba Environment	MA Air Standards & Studies	E	Dave Bezak (204) 945-7046
	Manitoba EMO	MA Planning & Research	E	Mark Bennett (204) 945-4791
9 B)	Transport Canada	CANUTEC	E	Ottawa (613) 996-6666
	CCPA	TEAP	E	
	CDI Inst., N.Y.	CHLOREP	E	
	Transport	Qué Regs require transporter to have info	E	André Ares (418) 643-2235
	Environment Ontario	Ont SAC arranges for on-scene MOE representatives	E	Gary Zikovitz 1-800-268-6060
	APSS	AB Compliance information Center onsite/offsite	E	1-800-272-9600// 403-422-9600
	APSS	AB information/ response coord for transp. accidents		

R: RECOMMENDATION; S:STATUS, PLEASE INDICATE : EXISTING: E, PLANNED: P + DATE

"Lessons from Accidents"

Conclusion 9

There is a need for a greater and more accessible exchange of information on lessons learned for prevention and response purposes from previous accidents and near-misses. A Canadian forum for inter-company, inter-industry and inter-government sharing of such information is desirable. Greater Canadian participation in, and subscription to, existing information exchange schemes in the U.K. and/or the U.S.A. would also be beneficial.

Recommendation 9

Through their industry associations, the Canadian chemical and petroleum industries should jointly evaluate existing accident information exchange systems and, in consultation with federal and provincial government agencies, develop a co-operative Canadian program or increase the level of participation in existing international systems, to ensure a greater exchange and application of accident lessons learned in Canada. Other industries and all levels of government should be encouraged to participate whenever appropriate. (Federal: E, L, T; Provincial: P, E, L, T; Industry)

R	AGENCIES	PROGRAMS	S	CONTACT
9	Plants listed in 1A)	Qué		Continual contact, seminars, committees...
	Industrial associations,			A provincial committee for emergency preparedness
	BPCQ, MENVIQ, Transport..	Qué		is being formed in Quebec.
	Manitoba Environment	MA		Environmental Accident Response
	Manitoba EMO	MA		Planning & Research
	APSS	AB		Compliance Info Center: Accident response
	APSS	AB		analysis and follow-up
			E	Dave Ediger (204)945-7042
			E	Mark Bennett (204)945-4791
			E	S.P. Hammond (403)451-7131

R: RECOMMENDATION: S:STATUS, PLEASE INDICATE : EXISTING: E, PLANNED: P + DATE

Chemical Training for First Responders

Conclusion 10

In the event of a chemical accident, first response is usually provided by the local company, police or fire department. While company officials may be knowledgeable about the chemicals at a particular site, firefighters and police in many situations do not have the benefit of this training. Further, many firefighters are volunteers who may never have had the experience of handling a chemical accident.

While there are teaching facilities for on-scene commanders and firefighters, it is impractical to train every officer or even a few on each force to be knowledgeable about all of the hazardous chemicals in Canadian commerce. What is most crucial is to train the first responder how to access chemical expertise, such as may be available locally, or as provided by CANUTEC, the Transportation Emergency Assistance Plan (TEAP), major railways (CN and CP) and the 24-hour emergency spill reporting networks available in each province.

Recommendation 10

- (a) For their own protection, and for the protection of the communities they serve, first responders should be trained to access chemical expertise before attempting to control unfamiliar chemicals or mixtures. (Municipalities)
- (b) Agencies responsible for providing this chemical expertise should ensure that their programs are widely known by all first responders. (Federal: E, P, T; Provincial: E, P, T)
- (c) In those municipalities where hazardous chemicals are manufactured, used or transported, the training of first responders should be continually upgraded and carried out with industry wherever possible. (Municipalities; Industry)

R	AGENCIES	PROGRAMS	S	CONTACT
13 A)				
	CCPA See Appendix 13	Eight Seminars on CAER	E	Art O'Connor, (613) 237-6215
	CCPA	Presentation at EPC Symposium on Emergency	E	Art O'Connor, (613) 237-6215
	CCPA	Media Training Seminars	E	Art O'Connor, (613) 237-6215
	CCPA	CAER publicity during Environment Week	P	Art O'Connor, (613) 237-6215
	Plants listed in 1A	Qué Know about &/or use CAER program		
13 B)				
	NB Assoc of Fire Chiefs	NB With NB & Ind to develop a 2nd level response	E	Fire Marshall (506)453-2004
	NB Assoc of Fire Chiefs	NB capability throughout the Prov.		
	BPCQ	Qué Present risk maps to municipalities	P	Pierre Brien (418)643-3256
	BPCQ	Qué		Jacques Bastien(418)643-4776
	Manitoba Environment	MA Environment Accident Response	E	Dave Ediger (204)945-7042
	Manitoba EMO	MA Municipal Services	E	Fred Zeggil (204)945-4790
13 C)				
	C.I.L.	Dalhousie NB CAER program	E	
	Tioxide Canada	Tracy, Qué CAER program	E	
	Union Carbide	Moore Twp, Ont CAER program	E	Richard Lawton
	Uniroyal Chemical	Elsira, Ont CAER program, open house	E	Walter Ruck
	Dow Chem.,	Sarnia, Ont CAER program + plant open wednesdays for public	E	Dick Ford
	DuPont	Maitland, Ont LEEDS/GRENVILLE PREPAREDNESS COMMITTEE	E	John Meyers
	ERCO	CAER program	E	Kelly James
	Borg-Warner Chem.	Cobourg, Ont Mtg w Mayor & Provincial Planning Chief	E	Edward Jackson
	LIS	Sarnia, Ont Brochures to each household	E	Don Dukes
	Union Carbide	Prentiss, AB CAER program w APSS, open house	E	Robert Seath
	Celanese	Edmonton AB CAER program	E	Tony Branecky
	Canadian Oxidental	Vanc., BC Joint program w fire dept.	E	Terry Litchfield
13 D)				
	BPCQ	Qué Warning system in Bécancour ind. parc (for evac)	P	Paul Chevette (819)375-1503
	Petroleum Association	Qué Mutual Aid (communication network in Mtl-East)	E	
	CRSSS	Qué Gentilly Nuclear Station: Plan for distribution of Iodine pills	E	J-Yves Legare (418)529-5311
	LIS, CAER Sarnia,	Ont Air warning system,detail on radio	E	Don Dukes

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Emergency Planning Support

Conclusion 14

In some provinces, emergency response planning is left to the discretion of the municipalities without the active support or guidance of provincial or federal agencies. As a result, many municipalities, because of resource limitations, are not in a position to deal effectively with major chemical incidents.

Recommendation 14

Where such arrangements do not currently exist, provincial agencies, with the assistance of federal departments as necessary, should:

- (a) provide guidance to the municipalities on how to prepare emergency response plans (Provincial: E, P);
- (b) provide financial support to those small municipalities which cannot develop or implement emergency response plans with their own resources (Provincial: E, P);
- (c) maintain inventories of emergency response equipment and be able to assist in the coordination and allocation of equipment and manpower in the event of major incidents (Provincial: E, P).

R	AGENCIES	PROGRAMS	S	CONTACT
14 A)	NB EMO	NB Lectures, workshops, video presentation	E	(506)453-2133
	BPCQ	Que Advice to mun., preparation of Emergency plans	E, P	Roland Gosselin (418)643-3256
	Emergency Planning	Ont Guidelines and planning assistance made available		
	Emergency Planning	Ont to all municipalities	E	J.L. Ellard (416)965-6932
	Manitoba EMO	MA Municipal Services	E	Fred Zeggil (204)945-4790
	APSS	AB All AB municipalities have EOP, except Lloydminster	E	R. Willhauk (403)451-7119

14 B)	BPCQ	Que Advice to mun.	E, P	Roland Gosselin (418)643-3256
	Joint Emergency Planning Prog	Ont Federal program extended to all Ontario municipalities through EPQ	E	J.L. Ellard (416)965-6932
	Manitoba EMO	MA Municipal Services	E	Fred Zeggil (204)945-4790
	APSS	AB Prior to 1987: \$ 17.5/capita grant to munic. to assist in developing emergency organization.	E	R. Willhauk (403)451-7119
	APSS			

14 C)	NB EMO	NB Emergency Measures Act & Prov Emer Action Plan		
	BPCQ	Que Maintains inventories and coordinates allocation	E	(506)453-2133
	BPCQ	Que of emergency response resources (equip., manpower)	E	Roland Gosselin (418)643-3256
	Manitoba Environment	MA Environmental Accident response	E	Dave Ediger (204)945-7042
	Manitoba EMO	MA Planning & Research	E	Mark Bennett (204)945-4791
	APSS	AB Financial assistance program for communication equipment (see Appendix 14-c)	E	R. Willhauk (403)451-7119

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Chemical Incident Simulation Exercises

Conclusion 15

While many municipalities across Canada have emergency plans to respond to major incidents, very few emergency organizations hold simulation exercises to test the adequacy of their plans. The Chemical Valley Emergency Control Organization in Sarnia and FORT MAP (the mutual aid response organization in Fort Saskatchewan) both hold annual simulations; their programs could be used as models for other emergency organizations.

Recommendation 15

To ensure the adequacy of emergency response plans, all emergency organizations should periodically carry out exercises to simulate an incident, evaluate the effectiveness of the response and make improvements where necessary. (Federal: E, P, T; Provincial: E, P; Municipalities; Industry)

R	AGENCIES	PROGRAMS	S	CONTACT
10 A)				
	Transport Canada	CANUTEC	E	(613)996-6666
	CCPA	TEAP, CAER	E	(613)237-5215
	NB EMO	NB Awareness seminar & handouts	E	(506)453-2133
	SPCQ	Qué First responders course (Appendix-10A)	E	E. Martinez (418)643-3256
	Fire Marshal	Ont First responders and awareness courses for munic.	E	Len Mills (416)965-4858
	Fire College	Ont Emergency planning courses	E	S.E. Schenk (705)687-3418
	Provincial Police Academy	Ont First responders training for police recruits &		
	Provincial Police Academy	Ont Incident commanders courses	E	(416)965-4818
	Police College	Ont First responders training for police recruits	E	(519)773-5361
	APSS	AB APSS Training school delivers 2 courses:	E	B. Bricker (403)422-0346
	APSS	AB -DG instructors Orientation, 2/year;		(training school)
	APSS	AB -DG Awareness :21 courses throughout AB.		
10 B)				
	EPC	Newsletter	E	
	Manitoba Environment	MA Environmental Accident Response	E	Dave Ediger (204)945-7042
	Manitoba EMO	MA Training & Education	E	Larry Swizda (204)945-4792
10 C)				
	EPC	Arnprior Training Centre	E	
	ERCO	Train 1st responders in own facilities	E	
	BPCQ	Qué Announces courses available in region	E	E. Martinez (418)643-3256

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Buffer Zones

Conclusion 11

Municipal land use planning is a means available for providing distance between industrial chemical operations and residential areas. Such buffer zones can help to diminish adverse impacts on the community from major industrial accidents. In many Canadian municipalities, residential areas have spread to the fencelines of industrial or storage sites leaving little or no buffer space. This is largely because there are many pressures on local officials to allow land designated as a buffer zone to be developed, or because residential development occurred before land-use planning came into effect.

On the other hand, some senior governments have assisted municipalities by providing guidance and resources to ensure that plants that manufacture or use hazardous materials are located away from residential areas.

Recommendation 11

- (a) Municipalities should introduce zoning regulations to create buffer zones between residential areas and new or existing (when possible) industrial sites. (Municipalities)
- (b) Senior governments should increase their efforts to assist municipalities in siting new installations that handle chemicals away from residential areas. (Provinces)
- (c) Where existing industrial plants dealing with hazardous chemicals, are already located in close proximity to residences, such plants should examine the feasibility of producing less hazardous chemicals at that site, make a concerted effort to conduct more frequent safety audits, and develop contingency plans on a priority basis in conjunction with local authorities. (Municipalities; Industry)

R	AGENCIES	PROGRAMS	S	CONTACT
11 A)				
	MAM Munic. S St-Laurence river	Qué Zoning regulations	E	Marcel Meunier (418)691-2015
	MAM Munic. N St-Laurence river	Qué		Charland Martin (418)691-2003

11 B)				
	MENVIR, BPCQ	Qué Development of buffer zones		
	Manitoba Environment	MA Environmental Assessment	E	Brian Blunt (204)945-7085
	Manitoba EMO	MA	E	(204)945-4772

11 C)				
	BPCQ (Appendix-11c)	Qué Development of municipal emergency plans	E,PRoland Bosselin	(418)643-3256

R: RECOMMENDATION; S: STATUS, PLEASE INDICATE ; EXISTING: E, PLANNED: P + DATE

Dangerous Goods Routes

Conclusion 12

A few municipalities have established designated routes for dangerous goods, particularly highways to prevent such traffic from going through heavily populated areas, as a preventive measure. Other communities are studying this possibility.

Recommendation 12

Governments at all levels should examine the need for legislation or guidelines to establish traffic routes for dangerous goods to minimize the risk of public exposure.
(Federal: T; Provincial: T; Municipalities; Industry)

R	AGENCIES	PROGRAMS	S	CONTACT
12 A)	3PCQ	Qué Advise municipalities on their need of dangerous goods routes.	P	Roland Gosselin (418) 643-3256
	& Transport Québec (Appendix 12)			
	Toronto area dangerous goods ..	Study ways and means of improving safety including		
	Task Force	Ont feasibility of rerouting or relocating rail flow		
	Task Force	Ont of dangerous goods.	E	E. Gilbert (416) 224-4612
	APSS	AB Regulatory Standards & Approvals	E	S.P. Hammond (403) 451-7131

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Community Awareness/Emergency Response

Conclusion 13

One of the important lessons to come out of the Bhopal experience is the importance of on-going good relations and the ability to communicate quickly between local industry and neighbouring communities regarding safety and response programs. While some industries have initiated this dialogue on their own or as a group, further work is needed by companies in the petroleum and chemical industries and in other industries using or moving hazardous chemicals to improve the level of community awareness and readiness and to ensure contingency plans are compatible with those of the nearby municipalities.

Programs such as that described in the Chemical Manufacturers Association's "Community Awareness and Emergency Response Handbook (CAER)" could be used as the basis for developing Canadian versions. Through the Lambton Industrial Society and local officials, such a program is now being implemented in Sarnia and will eventually be integrated into the Chemical Valley Emergency Control Organization's plan.

Governments have an obligation to encourage their officials to seek hazard information, and to participate with industries in preparing mutually-supportive contingency plans and warning systems for public response in case of major chemical accidents at nearby plants and in transportation corridors.

Recommendation 13

- (a) The Canadian Chemical Producers' Association and other appropriate industrial associations should develop programs for their companies based on the principles of the Community Awareness and Emergency Response Program developed by the U.S. chemical industry. CCPA members should pass on the principles of this program to their major customers and other industry associations. (Industry)
- (b) Municipal governments should become aware of the potential chemical hazards that exist in their communities and, working with other levels of government, ensure that resources are provided to establish adequate public protection measures. (Federal: P, E; Provincial: P, E; Municipalities; Industry)
- (c) Working together, industry and local governments, aided by representative associations such as the Canadian Chemical Producers' Association and the Federation of Canadian Municipalities, should establish closer liaison and develop formal programs for community awareness and emergency response. (Industry; Municipalities)
- (d) Municipalities/provinces through existing emergency response associations, should establish the need for a public warning in case of a localized, rapidly developing events such as a Bhopal-type incident. (Federal: P; Provincial: P; Municipalities; Industry)

AGENCIES	PROGRAMS	CONTACT
NE ENO	NB Mock disaster exercises, -frequentl-	E (506)453-2133
BPCC, HydroQuebec	Operation DERAD 1: 1985/DERAD 2	E,P
Gentilly, Qué	Exercice: Mar 1987	E
Beauharnois, Qué	Exer : 1986	E
Ultramar	Exer : 1987	E
Shell	Simulation: min 6 exercices/year (appendix 15)	E Guy Archambault (418)875-4340
API:	Exer : Oct 86, Sept 87	E
Sept-Îles	Exer : Sep 86, & to be determined	P
Québec	Exer : Jun 86, Sep 87	E
Rimouski	Exer : Oct 86, Sep 87	E
Montréal	Exer : May 86, Sep 87	E
Chicoutimi	Exer : Aug 86, Sept 87	P
Abitibi	Exercise & assistance available to all municip.	E J.L. Eliard (416)965-6708
Emergency planning Ontario	Exercise: Nov.20,1986	E John Meyers
DuPont	Exercise	E Walter Ruck
Maitland, Ont	Exercise: July 86	E Richard Lawton
Uniroyal Chemical	Environmental Accident Response	E Dave Ediger (204)945-7042
Elmira, Ont	Training & Education	E Larry Gwiazda (204)945-4792
Union Carbide	Exercise	E Robert Seath
Moore Twp, Ont	Exer	E William Stephenson
Manitoba Environment	Exer with Municipalities, Sour Gas Release Plan	E R. Willhauk (403)451-7119
Manitoba ENO	is exercised annually, real emergencies enable	
Union Carbide	evaluation/improvement of ERP	
Prentiss, AB		
Alberta Gas Ethylene		
APSS		
APSS		
APSS		

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Coordination of Legislation Pertaining to Hazardous Chemicals

Conclusion 16

Legislation dealing with safety and prevention of accidents, both in the work place and in transport, is well established in Canada. Regulations dealing with hazardous commodities, specifically in the areas of occupational health and transport, are continually under review and updated in light of new information. Occupational health and safety legislation is for the most part the responsibility of the provinces, with some programs such as the Workplace Hazardous Materials Information System Program (WHMIS) being coordinated nationally by the Federal Department of Labour. Provinces will also become responsible for implementation of the Transportation of Dangerous Goods Regulations.

While there appears to be adequate safety legislation in place, some confusion may arise as to who has responsibility for various activities in various jurisdictions. For example, the procedures for obtaining appropriate permits vary considerably from province to province. Certain provinces have established interdepartmental committees to ensure that legislation and program activities are co-ordinated.

Recommendation 16

Federal and provincial governments should examine the coordination of legislation and programs particularly in relation to the prevention of major industrial accidents within their jurisdictions to ensure that gaps do not exist. (Federal: P, E, L, H, T; Provincial: P, E, L, H, T)

Technology Development

Conclusion 17

Countermeasures technology for Bhopal-type incidents is very limited. Although some measures and equipment are available to prevent medium-sized events from escalating into major incidents, increased efforts are needed to expand the frontiers of this technology and to assess and widen the application of existing technology. Greater consultation and broader participation by industries and governments would make this research program more effective.

Recommendation 17

- (a) Environment Canada should continue its work as the federal focal point for research and development related to chemical spill countermeasures. It must also continue to monitor and participate in relevant spill technology projects undertaken elsewhere in the world relating to existing high priority toxic chemicals and other chemicals identified as having potential to create Bhopal-type incidents. However, increased input on needs and priorities identification should be sought from federal, provincial, municipal and industrial users of the technology. (Federal: E)
- (b) The petroleum and chemical industries should continue to participate with Environment Canada in relevant research projects both for Bhopal-type chemicals and other spill problems. Industry associations should further encourage the marketing or sharing of useful information where the research and development is being done by individual companies. (Federal: E; Industry)
- (c) Groups of chemical companies producing or using products having similar properties or behaviour should pool their resources and undertake jointly, or in cooperation with Environment Canada specific new countermeasures projects for Bhopal-type chemicals and other priority chemicals having medium-to-major spill potential. (Federal: E; Industry)

9 AGENCIES	PROGRAMS	5 CONTACT
10 Quebec: Transport, CSST	Qué Collaboration between diff depts re: Labelling of dangerous goods (Appendix 16)	E
Manitoba Environment	MA Transportation & Handling of D.G.	E Don Wilson (204)945-7090
Manitoba EMO	MA Planning & Research	E Mark Bennett (204)945-4791
APSS	AB Review & evaluation of existing legislation	E M. Egner (403)451-7107

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Emergency Medical Treatment

Conclusion 18

Hospital and medical staff are well-prepared to handle accidents involving household chemicals or poisons. However, readily-available information required for emergency medical treatment of mass casualties from a chemical release, chemical fumes and combustion products appears to be lacking in many areas of the country.

Recommendation 18

- (a) The Department of Health and Welfare should lead a federal/provincial study group, including professionals in emergency medicine, to clarify and consolidate information for emergency medical treatment and first aid for victims of chemical accidents, and those exposed to combustion products of chemical fires. A secondary task of this group would be to review training and planning aspects of mass casualty care particularly as they relate to a major chemical incident. This group should also identify shortfalls in the information base and seek sponsors/funding for projects to fill in the missing information. This information should be distributed to hospitals, poison control centres and emergency clinics, as well as medical teaching institutions and first aid training organizations such as St. John's Ambulance. (Federal: H; Provincial: H)
- (b) The establishment of a national emergency medical aid response centre or regional centres should be considered by this group. (Federal: H, E; Provincial: P, H, E)

R AGENCIES	PROGRAMS	S CONTACT
13 A CHLL	Que Toxicology centre	E Dr. Albert Hastel (418) 654-2254
CHLL	Que Poison centre	E Dr. Sansfaçon (418) 656-8090
	(See appendix 18)	
Manitoba Health	MA Emergency Health & Ambulance	E L.Bell (204) 786-7286

18 B)

 RECOMMENDATION: S:STATUS, PLEASE INDICATE : EXISTING: E, PLANNED: P + DATE

Advanced Emergency Preparedness Activities

Conclusion 19

Canada's immediate priority in emergency preparedness is the development of adequate contingency plans and emergency response systems. Beyond this, further advances could be made in the areas of:

- (a) airborne chemical dispersion modelling and improvements in public warning systems;
- (b) methods for objectively assessing emergency response capability; and
- (c) programs for career development of professional emergency planners.

Recommendation 19

- (a) Public protection decisions require knowledge by local authorities of expected movement of airborne chemical clouds, and an ability to warn residents quickly. To assist local authorities in public protection, realistic trajectory modelling should be available, together with alarm systems for all areas where major incidents may occur. (Federal: P, E; Provincial: P, E; Municipalities; Industry)
- (b) A study, with provincial, municipal, federal and industrial participation, should be initiated by agencies concerned with emergency preparedness to determine the feasibility of an objective measurement system for emergency response capability. If feasible, the system should be developed and applied at all levels of government. (Federal: E, P; Provincial: E, P; Municipalities; Industry)
- (c) A continuing program for the further education and professional career development of emergency managers and planners should be developed in Canada, as a joint federal/provincial project, in consultation with industrial and municipal emergency planners. (Federal: P, E; Provincial: P, E; Municipalities; Industry)

R	AGENCIES	PROGRAMS	S	CONTACT
19 A)	BPCQ	Que Activities re: preparation of emergency plans	E	Roland Gosselin (418)643-3256
	Manitoba Environment	MA Air Standards & Studies	E	Dave Bezak (204)945-7046
	Manitoba EMC	MA	E	(204)945-4772
	APSS	AB APSS, ERCB, Env., Occup Health, Univ AB & CPA are	E	F. Nesbitt (403)451-7143
	APSS	AB studying whether evac vs shelter is preferred		
	APSS	AB during toxic gas releases.		

19 B)	BPCQ	Que Activities re: preparation of emergency plans	E	Roland Gosselin (418)643-3256
	Manitoba EMC	MA Emergency Preparedness Coordination	E	Henry Eckert (204)945-4789

19 C)	BPCQ	Que Activities re: preparation of emergency plans	E	Roland Gosselin (418)643-3256
	Manitoba EMC	MA Training & Education	E	Larry Gwiazda (204)945-4792

R: RECOMMENDATION; S:STATUS, PLEASE INDICATE : EXISTING: E, PLANNED: P + DATE

Professional Safety Training

Conclusion 20

Safety practices and loss prevention programs are a part of an evolving science and new technology. It is important to keep abreast of all the innovations and international experience.

Recommendation 20

Scientific and engineering professionals should receive training in accident and loss prevention. Industrial management courses should address safety as an integral part of the manager's range of responsibilities. (Industry; Universities)