

November 9, 2001

The Hon. D. Anderson
Minister of the Environment
28th Floor
10 Wellington St.
Hull, Quebec
K1A 0H3

Re: Emergency Prevention, Preparedness and Planning at Canadian Industrial Facilities using Hazardous Materials.

Dear Minister,

The events of September 11, 2001 have highlighted the importance of steps to prevent and prepare for emergencies, such as spills, leaks, fires and explosions at industrial, commercial and institutional facilities that use or store hazardous materials.

In the past few years, Canada has seen a number of emergencies, which have resulted in major releases of toxic substances and other substances of concern into the environment. These have included the July 1997 Plastimet fire in Hamilton, Ontario, the July 1999 Hub Oil Recycling fire in Calgary, Alberta, and the April 2000 U.S.E. Hickson Products Ltd. fire in Scarborough, Ontario. In each case significant questions were raised regarding the adequacy of the steps which had been taken to prevent such emergencies, and of the measures taken in response to them.

Surprisingly, despite having authority to address these issues under sections 199 and 200 of the *Canadian Environmental Protection Act, 1999*, with the exception of facilities storing PCBs, the federal government has established no regulations respecting prevention, preparedness, response and recovery from emergencies involving hazardous substances. Some provinces have established requirements that facilities using or storing certain types of hazardous materials, such as flammable liquids, must have approved fire safety plans through their fire codes. However, for the most part, emergency preparedness, planning and prevention requirements for industrial facilities have been left in the hands of local fire departments, and have been a function of the resources and capacity of those agencies.

The situation in Canada in this respect is in sharp contrast to that in the United States where the federal government has put in place a clear set of rules regarding emergency preparedness for industrial facilities.

The process began in 1986 when, in the aftermath of the disastrous leak at a pesticide plant in Bhopal, India that killed more than 3,000 people, the U.S. Congress enacted *the Emergency Planning and Community Right to Know Act*. Under the hazardous chemicals reporting provisions of the Act, facilities storing hazardous chemicals above specific thresholds must report the chemical type and storage amount to local and state emergency planning committees. The planning committees must make the hazardous chemical inventory information submitted by local facilities available to the public. The Act also created the Toxic Release Inventory which, like Canada's National Pollutant Release Inventory (NPRI), requires that companies report on their releases of toxic chemicals into the air, water and land, and transfers of waste to disposal.

The U.S. emergency planning rules were further strengthened by amendments to the *Clean Air Act* adopted in 1990. These require that companies of all sizes that use any of 140 flammable or toxic substances develop risk management programs. The specific requirements for the programs include:

- a hazard assessment that details the potential effects of an accidental release;
- an accident history of the last five years and an evaluation of worse-case and alternative accidental releases;
- a prevention program that includes safety precautions and maintenance, monitoring and employee training measures; and
- an emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies should an accident occur.

Risk management plans, containing a summary of each facility's program are required to be made available to the public. By June 1999, more than 60,000 facilities had filed such plans.

The goal of the risk management plan is to reduce chemical risk at the local level. USEPA states that this information helps local fire, policy and emergency response personnel, and is useful to citizens in understanding the chemical hazards in communities. The basic federal requirements have been supplemented with additional state requirements in many States.

The U.S. approach provides a potential model for the establishment of a framework for emergency prevention and preparedness for industrial facilities using and storing hazardous chemicals and materials in Canada.

The new *Canadian Environmental Protection Act* (CEPA) enacted in 1999 provides you, as Minister of the Environment, with a number of important powers in this regard. Specifically, section 199(1) of the Act permits you to require any person that you consider appropriate to prepare and implement an emergency plan respecting the prevention of, preparedness for, response to, or recovery from an environmental emergency in respect to substances presently on the List of Toxic Substances (TSL) or substances recommended by you and the Minister of Health for addition to the TSL under the Act.

The Minister of the Environment is permitted to specify the substance or group of substances in relation to which the plan is to be prepared, the period of time within which the plan is to be prepared and implemented, and other matters the Minister considers necessary. Facilities are

required to declare their preparation of a plan, and its implementation to the Minister. Plans are required to be kept at the location in relation to which they are prepared. The Minister may also require the submission of plans or parts of plans.

In addition to the Section 199 emergency planning provisions related to "toxic" substances, Part 8 of the new CEPA also includes general provisions permitting the establishment of regulations regarding emergency preparedness, prevention and response. These provisions apply to all substances, not only those declared "toxic" for the purposes of the Act.

Despite the finalization of Guidelines for Section 199 emergency plans in February 2001, no orders requiring the development and implementation of plans have been issued to date. Immediate use should be made of these powers in order to protect Canadians from emergencies involving CEPA toxic substances and substances recommended for addition to the TSL.

Specifically, emergency plans should be required for all facilities manufacturing, processing, otherwise using or storing CEPA toxic substances or substances proposed for addition to the TSL at or above the relevant NPRI reporting thresholds for those substances. Plans in relation to substances currently on the TSL or proposed for addition to the TSL should be required to be in place by January 1, 2003. The development of Emergency Plans should be required as a matter of policy upon the proposal by the Ministers of the addition of a new substance to the TSL.

Facilities should be permitted to develop response plans specific to their particular circumstances. However, certain core elements of plans should be prescribed as mandatory. This should include the key elements of USEPA's *Clean Air Act* Risk Management Program requirements. Specific items for mandatory reporting should include:

- facility information (name, address, contact information);
- the date of notice and date of plan preparation;
- a description of rationale and contents of existing plans;
- an analysis of the use, processing, manufacturing, generation or storage for each substance, including uses at the facility, average quantities involved in manufacture, storage, distribution, transportation, handling, use, and disposal, and the maximum quantity on site at any given time over the year;
- a description of potential on-site emergencies involving each substance including fires, explosions, leaks/spills, or structural failures (e.g. mine tailings storage with heavy metals) and the potential effects, including worse-case scenarios;
- the adoption of specific measures to prevent, prepare for, respond to and recover from emergencies involving toxic substance(s);
- an accident history involving each substance over past 5 years;
- other measures in relation to the substances of concern;
- employee training and testing measures;
- an emergency response program that sets out emergency health care, and employee training measures and procedures for informing the public and response agencies should an accident occur;
- a summary of the facility's emergency plan to be made available to the public; and
- provisions for reviewing and updating plan on at least an annual basis.

Section 199 emergency plans should be required to be submitted to Environment Canada on a regular basis. Enforcement Officers should confirm the existence of facility emergency plans, ensure that they contain all of the required plan elements and are being implemented as per facility declarations as part of their routine inspections of facilities regulated under CEPA. Training and resources should be made available to support these activities.

Emergency plans should be required to be updated each year and facilities required to declare their implementation of planning requirements on an annual basis. New plans should be required to be developed and submitted every five years.

In addition to the immediate application of emergency planning requirements with respect to facilities that use or store CEPA toxic substances, the more general emergency planning provisions of Part 8 of CEPA should be used, in the longer term, to develop an emergency preparedness system for hazardous substances similar to that established in the United States.

In the United States, extensive emergency preparedness and planning requirements have been established for facilities using, storing or manufacturing hazardous substances. Canada's arrangements at the federal level with respect to emergency planning for toxic substances are, by comparison, virtually non-existent.

The emergency planning provisions of the new *Canadian Environmental Protection Act* provide an opportunity to establish such a framework for Canada. The Institute strongly recommends the use of these provisions to ensure that facilities develop plans to prevent and respond to emergencies involving hazardous substances which they manufacture, process, use or store, and that emergency response agencies and host communities have access to information regarding the presence of these substances.

I would be pleased to discuss these matters with you, your staff or your officials.

Yours sincerely,

Mark S. Winfield, Ph.D.
Director
Environmental Governance.

Cc: The Hon. C. Caccia, M.P., Chair, House of Commons Standing Committee on
Environment and Sustainable Development
Johanne Gelinas, Commissioner for the Environment and Sustainable Development.

