

Chapter 3: The Standard Setting Framework

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Chapter 3: The Standard Setting Framework

3.1 INTRODUCTION

It is clear from the preceding review that environmental contamination can be a significant factor in the health of children. As the summary for Chapter 2 notes, very large numbers of children have been and continue to be affected by contaminants such as lead as well as by air pollutants that can contribute to serious respiratory problems, including asthma. For the less understood pollutants, i.e., the vast majority of them, the potential exists for equally huge numbers of children to be affected. For example, although there is a high degree of uncertainty as to the nature of the causal relationship (if any) between chemicals capable of endocrine-disrupting effects and negative health effects in children, the potential scale of the problem is immense in terms of numbers of children that could be affected. The severity of health effects is also deeply troubling. Increases are occurring in the rates of childhood cancer and learning disabilities. Again, although there is a high degree of uncertainty, environmental pollutants could well be contributing factors. Although still relatively rare, such effects can be either fatal or have very serious, often permanent, negative health effects.

The public policy response to these issues is a complex story. One objective of this report is to simply make sense of how the system operates in order to then assess whether it is responding adequately to the known problems and potential risks to children.

To begin, this chapter describes the basic regulatory framework of the federal and provincial governments for the standard-setting areas covered in this study. It summarizes, using information provided by these government agencies, the governmental players involved, their goals/mandates and legal and policy tools and their interactions with each other. It in no way attempts to assess the validity of the self-descriptions provided. An assessment of whether the goals as stated have been accomplished have been accomplished with respect to children's health is the subject of chapters 4 -7 and particularly the two case studies.

Additionally, the standard setting areas covered in this review are rapidly changing, and thus the regulatory framework is stated as at the date of writing. Before describing the individual departments of relevance to the standard-setting reviewed in this study, the constitutional context is described whereby powers are divided between the federal and provincial governments.

3.2 THE CONSTITUTIONAL CONTEXT

As a Constitutional Monarchy, Canada's legislative powers are split between the Federal, Provincial, and increasingly, the First Nations levels of government. Britain provided Canada with its rights and responsibilities under the *Constitution Act, 1867*¹. The *Constitution Act, 1982*² in effect "patriated" this legislation, and provided that henceforth all constitutional changes would be made in Canada.³

¹ *Constitution Act, 1867*, (U.K.), 30 & 31 Vict., c.3 (formerly the *British North America Act*).

² *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982* (U.K.), 1982, c. 11 [hereinafter *Constitution Act*].

³ M. Fagan & D. Lloyd, *Dynamic Canada: The Environment and the Economy* (Toronto: McGraw-Hill Ryerson, 1991) at 210.

The *Constitution Act* provides for the federal division of legislative powers. It confers specific exclusive powers on both the Parliament of Canada and the Provincial legislatures and leaves to the Parliament a residual power to make laws for the peace, order and good government of Canada.

The *Constitution Act* does not specifically mention jurisdiction in respect of the environment. As a result, the courts have had the task of determining the authority for environmental law-making on the basis of the other powers the Act assigned to the federal and provincial governments. The courts have given legal authority for some environmental matters to the federal government, some to the provinces, and some to both levels ("concurrent powers").

Because there are areas of separate responsibility and areas of overlap, environmental standard setting entails considerable interplay between both levels of government. The regulation of pesticides provides a good example of the overlap that occurs between federal and provincial jurisdictions. The federal government determines which pesticides are permitted for use in Canada and specifies labelling and some use restrictions, while the provincial government decides on the allocation of the permitted uses through a system of permits and licenses.

In addition, "health" is not mentioned specifically in the *Constitution Act*. Thus it is not in the exclusive domain of the federal Parliament or the provincial legislatures. The courts have recognized that federal authority in matters of health protection derive largely from its constitutionally conferred power over criminal law. Criminal law allows Parliament to prohibit a public evil. The federal government can formulate and enforce regulations that establish the parameters of such prohibition. Under the *Constitution Act* the federal government has power to regulate "trade and commerce," but only when it crosses provincial/territorial or national borders.⁴ The *Constitution Act* gives the provinces responsibilities over hospitals, property, civil rights and matters of a local nature.

3.3 THE FEDERAL GOVERNMENT

3.3.1 Introduction

Responsibility within the federal government for matters of health and environmental protection resides within the Departments of Health Canada, Environment Canada and Agriculture and Agri-Food Canada. For the purposes of the standard-setting areas covered in this study, only the first two departments are investigated here. Also relevant is the Pest Management Regulatory Agency, which reports to the Minister of Health.

The authority, responsibilities, structure and activities of each of these agencies is described below. Of note first however are two overarching policies that apply, in the first instance, to the federal government as a whole, and in the second, to Health Canada's activities related to children's health.

Toxic Substances Management Policy

In 1995, the Government of Canada introduced a Toxic Substances Management Policy. The policy calls for virtual elimination from the environment of toxic substances that result from human activity and that are persistent and bioaccumulative.⁵ It also calls for "cradle-to-grave" (i.e., throughout their entire

⁴ Health Canada, *Shared Responsibilities, Shared Vision: Renewing the Federal Health Protection Legislation, A Discussion Paper* (Ottawa: Minister of Public Works and Government Services Canada, 1998) at 6-7; <http://www.hc-sc.gc.ca/hpb/transitn/index.html>.

⁵ http://www.ec.gc.ca/toxics/toxic1_e.html.

lifecycle) management of all other substances of concern that are released to the environment. The policy puts forward a preventive and precautionary approach to deal with all substances that enter the environment and could harm the environment or human health. The policy is intended to guide federal regulatory and non-regulatory programs by defining the ultimate management objective for a substance.

The policy is to be applied in all areas of federal responsibility and is to serve as the centrepiece of the Government of Canada's position in seeking to deal forcefully with toxic substances from domestic and foreign sources. It is intended to provide decision makers with direction, and sets out a framework to ensure that federal programs are consistent with the objectives of the policy.

The policy has two key management objectives. The first is the virtual elimination from the environment of toxic substances that result predominantly from human activity and that are persistent and bioaccumulative (Track 1 substances). The second is the management of other toxic substances and substances of concern, throughout their entire life cycles, to prevent or minimize their release into the environment (Track 2 substances).

1997 Declaration of the Environment Leaders of the Eight on Children's Environmental Health

The second overarching policy of note for federal government activities is Health Canada's 1997 Sustainable Development Strategy. As noted in Chapter 1, Canada was a signatory to the *1997 Declaration of the Environment Leaders of the Eight on Children's Environmental Health* and pledged to establish national policies that more appropriately take children into account when setting protective standards. Within Health Canada, this commitment has been further refined in that department's 1997 Sustainable Development Strategy⁶, referring to the G8 declaration as follows:

in accordance with the 1997 Declaration of the Environmental Leaders of the Eight on Children's Environmental Health [the Department plans to] implement actions on protecting children's health with respect to environmental risk assessments and standard setting, children's exposure to lead, microbiologically safe drinking water, air quality, emerging threats to children's health from endocrine disrupting chemicals and environmental tobacco smoke⁷

The implementation and effectiveness of both of these policies is the subject of this study. The TSMP is discussed specifically in Chapter 6: Toxic Substances.

3.3.2 Health Canada

3.3.2.1 Authority, Responsibilities and Co-ordination with Other Departments

The stated mission of Health Canada, a federal department, is "to help the people of Canada maintain and improve their health."⁸ The mandate of Health Canada is to provide national leadership, collaboration and co-ordination in health policy, regulations, disease and injury prevention, health promotion, health information and knowledge, and First Nations and Inuit health, in addition to the delivery of services. It works with other federal departments and agencies to reduce health and safety risks to Canadians. It also

⁶ *Sustaining Our Health: Health Canada's Sustainable Development Strategy*, November 1997. (www.hc-sc.gc.ca/susdevdur).

⁷ *Ibid.* at 26.

⁸ *Health Canada: Performance Report for the Period Ending March 31, 1999* (Ottawa: Minister of Public Works and Government Services Canada, 1999) at 10-11; (<http://www.tbs-sct.gc.ca/tb/key.html>). See also Health Canada Web Site: <http://www.hc-sc.gc.ca/english/about.htm#org>.

administers a number of Acts which are pertinent to the present study: (1) the *Food and Drugs Act*,⁹ (2) the *Hazardous Products Act*,¹⁰ (3) the *Canadian Environmental Protection Act*,¹¹ which it co-administers with Environment Canada; and (4) the *Pest Control Products Act*,¹² administered by the Pest Management Regulatory Agency (PMRA) which reports directly to the Minister of Health. The PMRA is described further below and its operations are discussed in detail in the Pesticides Case Study.

Health Canada provides assistance to other departments and agencies whose responsibilities touch on health. For example, Health Canada's responsibilities under the *Canadian Environmental Protection Act* (CEPA), are discharged in close co-operation with Environment Canada and the provinces. Section 6 of CEPA establishes a Federal-Provincial Advisory Committee composed of representatives from Environment Canada, Health and Welfare Canada and the provinces. The Committee is responsible for co-ordinating action on the control of toxic substances including facilitating the establishment of nationally-consistent objectives.

3.3.2.2 Structure and Relevant Activities

Table 3.1: Health Canada - Internal Organization

Branch	Directorate / Bureau
Health Protection Branch	<i>Environmental Health Directorate / Environmental Health Program (EHP):</i> <ul style="list-style-type: none"> • Bureau of Chemical Hazards • Product Safety Bureau • Radiation Protection Bureau • Office of Tobacco Control • Commercial Products Bureau • Toxic Substances Research Initiative Secretariat
Medical Services Branch	
Health Promotion and Programs Branch	
Policy and Consultation Branch	
Information, Analysis and Connectivity Branch	
Corporate Services Branch	

Source: <http://www.hc-sc.ca/english/about.htm#org>.

The above table sets out the 6 branches of Health Canada. Within each branch there are various Directorates which are further sub-divided into Bureaux or Offices. The Directorate or Program within the Health Protection Branch of relevance to this study is the Environmental Health Directorate/Environmental

⁹ *Food and Drugs Act*, R.S.C 1985, c. F-27.

¹⁰ *Hazardous Products Act*, R.S.C. 1985, c. H-3.

¹¹ *Canadian Environmental Protection Act*, R.S.C. 1988, c. C-15.3.

¹² *Pest Control Products Act*, R.S.C. 1985, c. P-9.

Health Program (EHP). Within the Environmental Health Directorate, there are several bureaux, all of which are listed. The following sub-sections provide the self-described mandate as well as the legislative or policy tools administered by the departments of relevance to this study.

Health Protection Branch (HPB)

The mandate of the HPB is "to protect Canadians against health risks in two broad areas, products and disease."¹³ The HPB is set up to assess the safety, effectiveness and quality of drugs and medical devices. Its focus is to protect Canadians from potential health hazards associated with tobacco, cosmetics, food and radiation-emitting devices, pesticides, certain consumer products and working and living environments.¹⁴ Further, it is to develop and enforce regulations under consumer and environmental protection laws, including the *Food and Drugs Act* and *CEPA*.¹⁵

Environmental Health Directorate

The Environmental Health Directorate, along with Regional Offices located throughout Canada comprises the Environmental Health Program (EHP). The role of the EHP is "to protect and improve the well-being of the people of Canada by assessing and managing the risks to health associated with the natural and technological environments."¹⁶ The EHP administers legislation and agreements undertaken by the Canadian Government in the areas of safe living and working environments. Further, its mandate is to identify, assess and manage health risks and provide sound and timely advice on environmental factors that can influence health and safety. The two bureaux relevant to this study are the Bureau of Chemical Hazards and the Product Safety Bureau. Also relevant is the Toxic Substances Research Initiative Secretariat. Each is described in turn below.

Bureau of Chemical Hazards

The Bureau of Chemical Hazards concentrates on the effects on human health of chemicals and biological agents in the environment.¹⁷ Its role is to identify chemicals to which people are exposed, assess their toxicity and quantify risk. It studies the health risks posed by chemicals and micro-organisms in air, soil, drinking water, and water for recreational uses. It manages health risks through the introduction of regulations, standards, and guidelines and by providing advice to other government departments, the provinces and the public.

The Bureau consists of three Divisions. The first is the Environment and Occupational Toxicology Division which conducts laboratory research and field studies to determine the toxic effects of chemical pollutants found in the natural environment, indoor environment and in the work place. The second is the Environmental Substances Division which conducts a mandatory assessment and management of health risks of new and existing chemicals and also assesses the products of biotechnology as prescribed under *CEPA* (see Environmental Contaminants project area, below). The third is the Environmental Health Effects Division which, among other responsibilities, monitors, researches and performs mathematical modelling to assess human exposure to chemical and microbial contaminants in natural and built environments and health effects associated with such contaminants, and develops health-based guidelines for air, drinking-water, and recreational-water quality.¹⁸

¹³ Health Canada, *Information: Health Protection Branch - Facts*, October 1998a.

¹⁴ *Ibid.*

¹⁵ <http://www.hc-sc.ca/english/about.htm#org>

¹⁶ <http://www.hc-sc.gc.ca/ehp/ehd/who/index.htm>

¹⁷ <http://www.hc-sc.gc.ca/ehp/ehd/bch/index.htm>

¹⁸ <http://www.hc-sc.gc.ca/ehp/ehd/who/bch.htm>

The Bureau's New Chemical Substances and Biotechnology Products project area has responsibilities under the *CEPA*. Its role is the risk assessment of new chemicals and products of biotechnology for potential health risks.¹⁹

The Bureau's Environmental Contaminants project area deals with risk assessment and management activities for "Priority" chemicals and toxicology research in support of *CEPA*.²⁰ The project encompasses work associated with the Priority Substance List (PSL) established under *CEPA*. Substances on this list are of the highest priority for assessment to determine whether environmental exposure to them risks the health of Canadians or the environment.²¹ The responsibility for assessing Priority Substances is shared by Health Canada and Environment Canada, and the PSL is established by both the Ministers of Health and the Environment.

Product Safety Bureau

The Product Safety Bureau's mandate is "to regulate and monitor compliance for the advertisement, sale and importation of hazardous or potentially hazardous products that are not covered by other legislation and to provide clients with information."²² It administers the *Hazardous Products Act*,²³ which provides the authority to control, restrict or prohibit certain materials as well as the sale, importation and advertisement of other dangerous or potentially dangerous consumer and industrial products. Regulations are enforced through product inspections and market sampling.²⁴

Toxic Substances Research Initiative Secretariat

The Toxic Substances Research Initiative Secretariat is a program within the Environmental Health Directorate, which provides funding for applied toxic substances research.²⁵ The Initiative supports research projects from both within and outside the federal government, as well as promoting partnerships between researchers in both sectors.

The guiding principle of the Initiative is to support scientific excellence and federal public policy objectives by, among other things, "[p]lacing emphasis on biological and chemical research which would benefit ecosystem health and priority population groups at risk, i.e., children, Aboriginal people and the elderly."²⁶

3.3.2.3 Resources

Like many federal government departments, Health Canada has recently experienced significant budgetary cuts. For 1997, Canada's spending on health was estimated to be nine per cent of Gross Domestic Product, down from 10.3 per cent in 1992, placing Canada in the middle of the Group of Seven countries in relative

¹⁹ *Ibid.*

²⁰ *Ibid.*

²¹ http://www.hc-sc.gc.ca/ehp/ehd/bch/env_contaminants/psap/psap.htm

²² <http://www.hc-sc.gc.ca/ehp/ehd/psb/mandate.htm>

²³ *Hazardous Products Act*, R.S.C. 1985, c. H-3.

²⁴ *Ibid.*

²⁵ <http://www.hc-sc.gc.ca/ehp/ehd/tsri/index.htm>

²⁶ *Ibid.*

expenditure for public health.²⁷

In 1998, the Health Protection Branch budget was approximately \$230 million.²⁸ This budget had been reduced by about \$25 million from its 1993/94 level. Additional funding was provided to new and priority areas such as AIDS and cancer research.²⁹

In the 1999 budget, however, the Government of Canada allocated \$65 million over the next three years to enhance its food safety programs in Health Canada and to develop new food safety and nutrition policies.³⁰

3.3.3 *Pest Management Regulatory Agency*

3.3.3.1 Authority, Responsibilities and Co-ordination with Other Departments

The Pest Management Regulatory Agency (PMRA) is a governmental agency which reports to the Minister of Health. For a much more detailed account of the PMRA, see the Pesticides Case Study.

Established in 1995, following the recommendation of the Pesticide Registration Review Team, the PMRA administers the *Pest Control Products Act*³¹ for Health Canada. The PMRA's stated goal is "to protect human health and the environment while supporting the competitiveness of agriculture, forestry, other resource sectors and manufacturing."³² It is "responsible for providing safe access to pest management tools while minimizing the risks to human and environmental health."³³

One of the PMRA's stated roles is to "consult and liaise with other federal departments, provincial and territorial governments, other national governments and international co-ordinating bodies."³⁴ The Alternative Strategies and Regulatory Affairs Division of the PMRA liaises with other federal government departments through the Policy Council and individual Memoranda of Understanding, and with provincial governments through the Federal-Provincial-Territorial Committee on Pesticide Management and Pesticides.

The PMRA also collaborates with pesticide regulators in the United States and is involved in several international pesticide fora. Policies and methodologies developed in these fora can significantly influence PMRA pesticide regulation.

²⁷ *Health Canada: Performance Report for the Period Ending March 31, 1998b* (Ottawa: Minister of Public Works and Government Services Canada, 1998); (<http://www.tbs-sct.gc.ca/tb/key.html>).

²⁸ Health Canada, 1998a, *op.cit.* at 3.

²⁹ *Ibid.*

³⁰ *The Canada Food Safety and Inspection Bill and Health Protection Legislative Renewal, April 1999*: http://www.hc-sc.gc.ca/hpb/transitn/food_e.html

³¹ *Pest Control Products Act*, R.S.C. 1985, c. P-9 [hereinafter *PCPA*]. Products regulated under the *PCPA* include herbicides, fungicides, insecticides, biological agents, antimicrobial agents, and growth regulators. See *Pest Control Products: Registration Handbook* (November 30, 1998) at 1 (Part 2); (<http://www.hc-sc.gc.ca/pmra-arla/hndbk-e.html>).

³² *Ibid.*

³³ *Ibid.*

³⁴ *Ibid.*

Under the North American Free Trade Agreement (NAFTA), a Technical Working Group on Pesticides was established in June, 1997 by Canada, Mexico and the United States. The Working Group seeks to establish work sharing as a routine practice among members by the year 2002. A further goal is the establishment of a North American market for pesticides, while maintaining high levels of environmental and health protection. To achieve these goals, the Working Group proposes to develop a common data submission format, a coordinated review process, and to take steps to minimize trade problems resulting from different maximum residue limits for commodities that are traded among the three countries. The realization of these objectives will require the harmonization of data requirements, relevant test protocols, data submission and study report formats, data review and risk assessment practices, regulatory decision making, and administrative processes and procedures.³⁵

In 1996, the PMRA and the U.S. Environmental Protection Agency established joint-review processes for reduced-risk chemical pesticides. The basis for joint-review is the desire to avoid the introduction of trade barriers if Canada does not co-ordinate its re-evaluation program with other countries, especially the United States. The implications of this situation are discussed further in Chapter 4. Very few Joint Reviews have been conducted. The PMRA has also stated that it plans to co-ordinate its re-evaluation (of registered pesticides) program with the EPA.³⁶

In addition to working with the United States, the PMRA also collaborates with the Pesticide Programme established by the Organization for Economic Co-operation and Development (OECD).

The OECD Pesticide Program was established in 1992 in response to the huge workload faced by individual countries with their re-evaluation/re-registration programs. These programs require the completion of new risk assessments for hundreds of pesticides that have been on the market for many years. The goal of the Pesticide Program is to assist OECD countries to share the work of undertaking pesticide risk assessments and finding new approaches to risk reduction. In furtherance of this goal, the Program has developed a database to facilitate contacts between countries that would like to exchange reports or collaborate on assessing a pesticide, and has developed common guidelines for data submissions and for government evaluation reports. The Pesticide Program also contributes to the OECD Environmental Health and Safety Program efforts to develop and harmonize test guidelines and assessment methods. The Pesticide Program works to harmonize core data requirements such as the basic studies required for pesticide registration.³⁷

³⁵ NAFTA Technical Working Group on Pesticides. *A North American Initiative for Pesticides: Operation of the NAFTA Technical Working Group on Pesticides*. November, 1998. <http://www.hc-sc.gc.ca/pmra-arla/qinter2-e.html>.

³⁶ Pest Management Regulatory Agency, Regulatory Proposal, PR099-01. A New Approach to Re-evaluation. December 3, 1999. <http://www.hc-sc.gc.ca/pmra-arla/qcont-e.html> to obtain via download: pro9901e.pdf

³⁷ For a description of current projects, see PMRA. *PMRA Table of Current OECD Pesticide Projects*. February 1999. Document No. OECD99-01. <http://www.hc-sc.gc.ca/pmra-arla/qinter-e.html>.

3.3.3.2 Structure and Relevant Activities

The Agency is organized into six divisions. Five of these divisions, and their corresponding responsibilities, are laid out in the following table (not included is the Laboratory and Services Division - LSD).

Table 3.2: Pest Management Regulatory Agency - Internal Organization

Division	Responsibility
Submission Management and Information Division (SMSD)	<ul style="list-style-type: none"> • Manages and tracks submissions • Conducts scientific screening of potential registrants
Product Sustainability and Co-ordination Division (PSCD)	<ul style="list-style-type: none"> • Undertakes efficacy assessments, sustainability and value assessments
Health Evaluation Division (HED)	<ul style="list-style-type: none"> • Provides expertise on human health hazards, risk assessment and risk mitigation • Conducts toxicology evaluation and exposure assessment.
Environmental Assessment Division (EAD)	<ul style="list-style-type: none"> • Provides expertise on environmental hazards, risk assessment and risk mitigation • Conducts assessments of the • environmental fate and effects of pest control products
Alternative Strategies and Regulatory Affairs Division (ASRAD)	<ul style="list-style-type: none"> • Directs the development, review and assessment of policies, regulations, programs and legislative amendments, including those related to sustainable pest management

Source: Health Canada, *The Pest Management Regulatory Agency: Overview Document*; (<http://www.hc-sc.gc.ca/pmra-arla/over-e.pdf>).

Several groups advise the PMRA, as described in the following table:

Table 3.3: Pest Management Regulatory Agency - Advisory Bodies

Advisory Body	Membership	Responsibility
Economic Management Advisory Committee	Representatives of the manufacturers and users of pest control products that are economically impacted by PMRA decisions.	Provides advice on mechanisms to improve efficiency and cost effectiveness.
Pest Management Advisory Council	Representatives of pesticide manufacturers, users and environmental and health groups, as well as individuals with appropriate expertise.	Makes recommendations regarding PMRA management, priorities and strategies. Acts as a forum for the exchange of ideas and advice.
Policy Council	PMRA Executive Director, Assistant Deputy Ministers of Agriculture and Agri-Food, Environment, Fisheries and Oceans, Health, Industry and Natural Resources.	Provides a forum for the exchange of information and advice between federal government departments and the PMRA.
Federal - Provincial - Territorial Committee on Pest Management and Pesticides	PMRA; provincial and territorial government representatives.	Promotes information exchange, the provision of advice and the harmonization of appropriate programs and policies.

Source: *Pest Control Products: Registration Handbook* (November 30, 1998); (<http://www.hc-sc.gc.ca/pmra-arla/hndbk-e.html>).

3.3.3.3 Resources

The PMRA budget is approximately \$28 million.³⁸ When first created, it had a budget of approximately \$34 million, with a mandate to reduce this amount through Cost Recovery fees received from industry.³⁹ However, not all of these fees were recovered, leaving PMRA short of its target revenue.⁴⁰ This short-fall has, at least in the past, been covered by Agriculture and Agri-Food Canada, and Health Canada.⁴¹

In 1997-98, the PMRA's actual net expenditures were \$15.7 million.⁴² In 1998-99, the PMRA's actual net

³⁸ Julia Langer, Director, Wildlife Toxicology Program, Worldwide Fund for Nature (WWF), Toronto, January 4, 1999 (pers. comm.).

³⁹ The revenues comprise one-time fees charged for review of applications for registration and annual maintenance fees for the right and privilege to sell registered products in Canada. Health Canada, 1998b, *op.cit.* at 90.

⁴⁰ In 1997-98, PMRA experienced a revenue shortfall of \$4 million in maintenance fees. This resulted in delaying the re-evaluation of registered products as well as delaying the elimination of the backlog. See *ibid.*

⁴¹ *Supra* note 38.

⁴² Health Canada, 1998b, *op.cit.* at 88.

expenditures increased to \$18.5 million.⁴³

3.3.4 *Environment Canada*

3.3.4.1 Authority, Responsibilities and Co-ordination with Other Departments

Environment Canada, established in 1971, is the primary federal agency responsible for environmental protection, with a mandate flowing from the *Department of the Environment Act*.⁴⁴ The Act provides the following mandate: "to preserve and enhance the quality of the natural environment (including migratory birds and other non-domestic flora and fauna), conserve and protect water resources, carry out meteorology, enforce the rules of the Canada-U.S. International Joint Commission, and co-ordinate federal environmental policies and programs."⁴⁵ Environment Canada's stated Mission is to "make sustainable development a reality in Canada by helping Canadians live in an environment that is protected, respected and conserved."⁴⁶ Environment Canada also states that "science and technology are the foundation for all of the department's policies, programs, technological solutions, services and operations."⁴⁷

Environment Canada administers, or has some role in the administration of, a number of federal statutes including, of importance to this study, the *Canadian Environmental Protection Act* (CEPA). First proclaimed in 1988 and revised in 1999, the "renewed" CEPA has as its focus pollution prevention rather than pollution controls, expands several legislative authorities and creates some new ones. For instance, it requires that all 23,000 substances in use in Canada be examined, introduces new deadlines for taking action on toxic substances, and requires virtual elimination of the most dangerous toxic substances. It addresses concerns about enforcement by giving "peace officer" status and expanded powers to enforcement officers.⁴⁸

Environment Canada states that its long-term goal is the understanding, and prevention or reduction of the environmental and human health threats posed by toxic substances and other substances of concern.⁴⁹ To this end, Environment Canada is implementing the new CEPA in conjunction with Health Canada (including the Pest Management Regulatory Agency), Industry Canada, Natural Resources Canada and Agriculture and Agri-Food Canada.⁵⁰ The ability of the federal government to set standards on toxic chemicals is significantly influenced by the Canada-Wide Accord on Environmental Harmonization (see Section 3.5 below concerning Federal-Provincial-Territorial Co-operation and Partnerships).

⁴³ http://www.ec.gc.ca/toxics/toxic1_e.html at 49.

⁴⁴ *Department of the Environment Act*, R.S.C. 1985, c. E-10.

⁴⁵ *Environment Canada, 1999-2000 Estimates: A Report on Plans and Priorities*, at 6; <http://www.ec.gc.ca/rpp/index.htm>

⁴⁶ *Ibid.* at 5.

⁴⁷ *Environment Canada: Performance Report For the Period Ending March 31, 1999* (Ottawa: Minister of Public Works and Government Services Canada, 1999); (<http://www.tbs-sct.gc.ca/rma/dpr/98-99/EC98dpre.pdf>)

⁴⁸ *Ibid.* at 18.

⁴⁹ Health Canada, 1998a, *op.cit.* at 7.

⁵⁰ *Ibid.*

3.3.4.2 Structure and Relevant Activities

Environment Canada is organized into seven headquarter organizations, and five integrated regions:

Table 3.4: Environment Canada: Headquarter Organizations And Regions

Headquarter	Regions
Office of the Minister and Deputy Minister	Atlantic
Atmospheric Environment Service	Quebec
Environmental Conservation Service	Ontario
Environmental Protection Service	Prairie and Northern
Corporate Services	Pacific and Yukon
Policy and Communications	
Human Resources Directorate	

Source: *Environment Canada, 1999-2000 Estimates: A Report on Plans and Priorities*;
<http://www.ec.gc.ca/rpp/index.htm>

Environment Canada is also organized along four business lines. Business lines are the forums for setting national direction, resource allocation and accountability:

Table 3.5: Environment Canada: Business Lines And Structure

Business Line	Structure
A Clean Environment	Atmospheric Change; Toxics; Compliance and Enforcement; Technologies, Jobs and Capacity Building; Partnerships for Sustainable Development; and Emergency Prevention and Preparedness
Nature	Biodiversity/Wildlife; Conserving Canada's Ecosystems; Compliance and Enforcement; Information Products and Services; and Partnerships for Sustainable Development
Weather & Environmental Predictions	Weather & Environmental Predictions; Atmospheric Change; and Information Products and Services
Management, Administration & Policy	Management and Administration; Information Products and Services, & Partnerships for Sustainable Development

Source: *Environment Canada, 1999-2000 Estimates: A Report on Plans and Priorities*;
<http://www.ec.gc.ca/rpp/index.htm>

3.3.4.3 Resources

Environment Canada has undergone significant changes in the past decade. Since the mid-1990s, Environment Canada has had its budget cut by some 40%.⁵¹ Environment Canada's total net budget for the fiscal year 1996-1997 was \$621.3 million, however this had decreased to \$551.0 million in 1998-1999. Of that amount, only \$358.2 million went toward environmental protection and emissions reductions.⁵² \$55.8 million of this amount was allocated for the region of Ontario.⁵³

In May of 1998, the Standing Committee on Environment and Sustainable Development released a scathing report on Environment Canada's enforcement record.⁵⁴ Although there are many dimensions to the problem, the lack of funding was a key issue in the discussion.

On the other hand, to meet the government's obligations under the revised *CEPA*, an additional \$42 million over three years was announced in the 1999 Federal budget.⁵⁵

3.4 THE PROVINCIAL LEVEL

3.4.1 Ministry of the Environment

3.4.1.1 Authority and Responsibilities

The Ontario Ministry of the Environment bears primary provincial responsibility for environmental protection. It has the ability to control provincial sources of pollution through its power to refuse approval or to impose conditions on an approval for any facility that may cause pollution. The MOE administers the *Environmental Protection Act*,⁵⁶ the *Environmental Assessment Act*,⁵⁷ the *Ontario Water Resources Act*.⁵⁸ the *Pesticides Act*⁵⁹ and the *Environmental Bill of Rights*.⁶⁰

⁵¹ Standing Committee on Environment and Sustainable Development, *Third Report: Enforcing Canada's Pollution Laws: The Public Interest Must Come First!*, May 1998, at 6; <http://www.parl.gc.ca/InfoComDoc/36/1/ENSU/Studies/Reports/ensurp03-e.htm>

⁵² Canadian Institute for Business and the Environment, Special Report on Environment Canada's Budget of \$551.0 Million in 1998-99 (1998) 2:14 *The Gallon Environment Letter* 1. The federal government combines the budgets of weather reporting and environmental protection. Canada's weather reporting function in 1998-1999 was allocated \$192.8 million, or 35% of Environment Canada's budget.

⁵³ *Ibid.* at 4.

⁵⁴ Standing Committee on Environment and Sustainable Development, 1998, *op.cit.*

⁵⁵ *Environment Canada, 1999-2000 Estimates: A Report on Plans and Priorities*, at 12; <http://www.ec.gc.ca/rpp/index.htm>.

⁵⁶ *Environmental Protection Act*, R.S.O. 1990, c.E.19, as amended.

⁵⁷ *Environmental Assessment Act*, R.S.O. 1990, c.E.19, as amended.

⁵⁸ *Ontario Water Resources Act*, R.S.O. 1990, c. O.40.

⁵⁹ *Pesticides Act*, R.S.O. 1990, c. P.11 (hereinafter *Pesticides Act*).

The MOE participates in a number of collaborative initiatives including: (1) the development of Canada-Wide Standards (see section 3.5 below); (2) the work of the Federal-Provincial Advisory Committee (FPAC), set up under CEPA to deal specifically with air issues of national concern; and (3) work under the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem.⁶¹

3.4.1.2 Structure and Relevant Activities

The Ministry is organized by division, as outlined in the table below. Each division is headed by an Assistant Deputy Minister.

Table 3.6: Ontario Ministry Of The Environment - Internal Structure

Division	Branches
Operations	<ul style="list-style-type: none"> • Approvals • Investigations and Enforcement • Environmental Assessment
Environmental Sciences and Standards	<ul style="list-style-type: none"> • Environmental Monitoring and Reporting <ul style="list-style-type: none"> - Standards Development Branch • Environmental Partnerships
Integrated Environmental Planning	<ul style="list-style-type: none"> • Waste Management Policy • Land Use Policy • Air Policy and Climate Change • Water Policy Branch
Corporate Management	
Intergovernmental Relations Office	
Communications	

Source: <http://www.ene.gov.on.ca/envision/org/org-moee.htm>

Table 3.6, above, sets out the six Divisions of the Ontario Ministry of the Environment. Only three of the Divisions will be examined in greater detail, below.⁶² Only those Branches having relevance to the present study are listed in the table.

Operations

The Operations Division is responsible for delivering programs to protect air quality, to protect surface and ground water quality and quantity, to manage the disposal of wastes, to ensure an adequate quality of drinking water and to control the use of pesticides. Additionally, this division is responsible for administering the ministry's approvals and licensing programs as well as an investigative and enforcement

⁶⁰ *Environmental Bill of Rights*, 1993, S.O. 1993, c.28, as amended.

⁶¹ See <http://www.ene.gov.on.ca/envision/news/coamb99.htm>, [Media Backgrounder] (September 21, 1999).

⁶² Descriptions of Ministry Divisions and Branches obtained from: <http://www.ene.gov.on.ca/envision/org/op.htm>; <http://www.ene.gov.on.ca/envision/org/essd.htm>

program to ensure compliance with environmental laws. The division has a province-wide network of regional, district and area offices. As well, it includes the Approvals Branch, the Investigations and Enforcement Branch and the Spills Action Centre.

Approvals Branch

Under the *Ontario Water Resources Act* and the *Environmental Protection Act*, the Approvals Branch reviews and approves applications for new or modified waste, water and sewage facilities or facilities which may emit a contaminant, including noise, to the air or water. It administers licence-issuing functions relating to pesticides and septic system haulers and installers. It provides technical advice and guidance to agencies delivering the subsurface sewage disposal program in Ontario.

Investigations and Enforcement Branch

The Investigations and Enforcement Branch is responsible for all aspects of environmental enforcement within the ministry including for the *Environmental Protection Act*, *Ontario Water Resources Act*, *Environmental Assessment Act*, and *Pesticides Act*.

Environmental Sciences and Standards Division

The stated intent of the Environmental Sciences and Standards Division is to provide the best available science and technology to support all decisions about the natural environment, and to implement those decisions by developing ecosystem-based programs and partnerships, setting scientifically credible standards, monitoring the environment and providing valuable analytical and scientific expertise. This division provides these services through its four branches: Environmental Monitoring and Reporting, Standards Development, Laboratory Services, Environmental Partnerships and through the Drive Clean Office, some of which are discussed below.

Laboratory Services Branch

The role of the Laboratory Services Branch is to provide analytical support for the ministry's environmental monitoring and regulatory programs. Further, its role is to provide analytical method development and support standard setting. Its role is also to ensure the data quality of ministry compliance, enforcement and emergency analytical testing.

Standards Development Branch

The Standards Development Branch is responsible for: (1) developing and promulgating environmental standards to protect both human and ecosystem health and the quality of the natural environment; (2) providing toxicological advice and diagnostic services on environmental contaminants and pesticides; (3) assessing the performance of new and emerging environmental technologies and promoting technology transfer; (4) administering the *Pesticides Act* and providing direction on the responsible use of pesticides in Ontario.

Environmental Partnerships Branch

The task of the Environmental Partnerships Branch is to develop, deliver, measure and provide advice on innovative, non-regulatory approaches that promote environmental protection. The branch works in areas such as pollution prevention, resource conservation, environmental management systems, green industry development and improving the efficiency and effectiveness of water and sewage infrastructure.

Integrated Environmental Planning Division

The responsibility of the Integrated Environmental Planning Division is to integrate the overall policy development and planning functions of the Ministry. This involves integrating and synthesizing all information, data and perspectives on the many aspects of the Ministry's mandate. The division consults extensively on developing policies, strategies and programs that support the Ministry's core business of

conservation and environmental protection. It is organized into the following branches: Waste Management Policy, Land Use Policy, Water Policy, and the Air Policy and Climate Change Branch, one of which is discussed below.

Air Policy and Climate Change Branch

The role of the Air Policy and Climate Change Branch is to develop policies and programs for the improvement and protection of Ontario's air quality. The branch develops policy regarding smog issues, acid rain, inhalable and respirable particulates and ozone-depleting substances. Further, it is responsible for the development of Ontario's position on climate change and other activities to reduce greenhouse gas emissions.

3.4.1.3 The Pesticides Act and the Pesticides Advisory Committee

In addition to the Divisions and Branches described above, the Ministry has established, under the *Pesticides Act*, a Pesticides Advisory Committee to provide advice on a range of matters relating to pesticides and pest control. Since the Pesticides Case Study focuses on the federal regulatory system for pesticides, the provincial powers and responsibilities are described here.

While the federal *Pest Control Products Act* determines which pesticides may be utilized in Canada, the Ontario *Pesticides Act* further refines this system. The provincial law prohibits the sale and use of a pesticide product unless it is registered under the federal *Pest Control Products Act* and classified in one of six schedules, or is exempt from classification. Pesticide products "are classified into six schedules on the basis of their toxicity, environmental or health hazard, persistence of the active ingredient or its metabolites, concentration, usage, federal class and registration status." The schedules also determine who may buy, sell and use the pesticide, as well as the applicability of obligations such as the need for safety equipment, warning signs and safety testing. Hence, it is this classification scheme that provides the basis for the regulation, distribution, availability and use of pesticide products in Ontario. The *Pesticides Act* "allows Ontario to be more restrictive than the federal government, but not less restrictive."⁶³

The Pesticides Advisory Committee, established under authority of the *Pesticides Act*, is firstly responsible for reviewing the *Pesticides Act* and Regulation 914.⁶⁴ As of April 1, 1999, Regulation 914, amended to O. Reg. 129/98, gives the Pesticides Advisory Committee the authority to approve the classification of a new product. Prior to this regulation, the Committee only had authority to review and recommend the classification of a new product, but had no approval authority. Additionally, Regulation 914 "now allows the sale and use of classified products as soon as the approved product is posted on the Internet, instead of being published in the Ontario Gazette."⁶⁵ The Pesticides Advisory Committee is also responsible for recommending changes and amendments to the Act to the Minister of the Environment. Next, it is responsible for advising the Minister of the Environment on matters relating to pesticides and pest control. Lastly, it is responsible for classifying all federally registered pesticides for sale, storage and use in Ontario.⁶⁶

⁶³ Ontario, Pesticides Advisory Committee, *Ontario Guidelines for Classification of Pesticides Products*, (Toronto: Queen's Printer for Ontario, April 1999) at 1.

⁶⁴ R.R.O. 1990, Reg. 914; O. Reg. 129/98.

⁶⁵ Ontario Ministry of the Environment website, *Pesticide Classification (April 1999)*; <http://www.ene.gov.on.ca/envision/news/licensing.htm>.

⁶⁶ Pesticides Advisory Committee website (<http://www.opac.gov.on.ca/frmwelc.htm>)

3.4.1.4 Resources

The operating budget for the Ministry of Environment has been dramatically cut in recent years. The Ministry's budget was cut from \$365.4 million in 1994-1995 to \$211.0 million in 1997-1998, a 44 per cent reduction.⁶⁷ Most recently, in 1999, the Ontario government announced it was further cutting the Ministry's budget to \$165 million,⁶⁸ representing less than half the budget of five years ago.

Funding for the development of environmental programs and standards was cut 99 per cent from \$51 million in 1994-1995 to \$500,000 in 1997-1998.⁶⁹ Further, Ministry staff positions were cut 36 per cent from 2430 in 1995 to 1550 in 1997.⁷⁰

3.5 FEDERAL - PROVINCIAL - TERRITORIAL CO-OPERATION AND PARTNERSHIPS

3.5.1 *Canadian Council of Ministers of the Environment*

3.5.1.1 Authority and Responsibilities

The Canadian Council of Ministers of the Environment (CCME) was formed in 1989. It is comprised of environment ministers from the federal, provincial and territorial governments. These 14 ministers usually meet twice a year "to discuss national environmental priorities and determine work to be carried out under the auspices of CCME."⁷¹ The CCME mandate is to work to promote co-operation on and co-ordination of interjurisdictional issues such as waste management, air pollution and toxic chemicals. CCME members propose nationally-consistent environmental standards and objectives. CCME does not have the authority to implement or enforce legislation, and thus each jurisdiction decides whether to adopt CCME proposals.

⁶⁷ Canadian Institute for Business and the Environment, Ontario Environment Budget Cut 44% (1997), July 23, *The Gallon Environment Letter* 1.

⁶⁸ J. McCarten, Ontario Detailing First Wave of New Spending Cuts, *Canadian Press Newstex* (18 November 1999).

⁶⁹ Canadian Institute for Business and the Environment, 1997, *op.cit.*

⁷⁰ *Ibid.*

⁷¹ CCME Web Site; http://www.ccme.ca/1e_about/1e.html

3.5.1.2 Structure and Relevant Activities

In January 1998, the CCME endorsed and announced several initiatives, including the Canada-wide Accord on Environmental Harmonization (discussed further below). Table 3.7 shows the CCME internal organization.

Table 3.7: Canadian Council Of Ministers Of The Environment - Internal Organization

Initiatives	Structure
Environmental Planning and Protection Committee	Steering Committee: <ul style="list-style-type: none"> • comprised of senior staff of each jurisdiction • provide on-going advice to the Council of Ministers • co-ordinate specific CCME projects
	Canada-Wide Standards: ⁷² <ul style="list-style-type: none"> • Particulate Matter • Mercury • Dioxins & Furans • Ground-Level Ozone • Benzene • Petroleum Hydrocarbons
	Hazardous Waste
	Water Quality Guidelines
	Economic Integration
	Soil Quality Guidelines
	Packaging
	National Air Issues Co-ordinating Committees - Other Air Issues
New Sub-agreements under Harmonization Accord	Monitoring and Reporting
	Enforcement
	Environmental Emergencies
	Research and Development

Source: http://www.ccme.ca/1e_about/1ea.html.

⁷² This is not a permanent list, and new substances can be added in the future. See discussions below and in Chapters 5 and 6 regarding Canada-Wide Standards.

3.5.1.3 Canada-Wide Accord on Environmental Harmonization

In 1993, the CCME identified harmonization of environmental management in Canada as a top priority⁷³ and developed the Canada-Wide Accord on Environmental Harmonization (discussed further in Chapter 4). On January 29, 1998, all jurisdictions except for Quebec⁷⁴ signed the Accord. While not a statute, the Accord holds the potential to have a dramatic impact on the way that standards are developed at both the federal and provincial levels.

The Accord is a multilateral umbrella agreement, whose intent is to provide a framework for achieving harmonization.⁷⁵ It provides a framework for the development of ancillary Sub-agreements on specific areas of environmental management. Three Sub-agreements have been developed to date: (1) Canada-wide Environmental Standards Sub-agreement; (2) Canada-wide Environmental Inspections Sub-agreement; and (3) Sub-agreement on Environmental Assessment. Further sub-agreements are currently in the process of negotiation, including ones on enforcement, monitoring and reporting, environmental emergencies, and research and development.⁷⁶

The Canada-wide Environmental Standards Sub-agreement is described below and its implications are discussed further in Chapters 5 and 6.

Canada-Wide Environmental Standards Sub-agreement: Canada-Wide Standards

The Canada-Wide Environmental Standards Sub-agreement "sets out the principles underpinning the development of Canada-wide Standards (CWS) for environmental quality and human health, and commits the governments to participate in their development. Such standards could include guidelines and objectives, as well as legally enforceable standards."⁷⁷ The focus of the Sub-agreement is on "ambient standards, so that all Canadians can expect a common high degree of environmental quality."⁷⁸ Ambient standards are described as levels of environmental quality for specific media (for example, air, water, soil, or sediment).⁷⁹

One of the stated underpinnings of the development and attainment of Canada-wide Environmental Standards is the Precautionary Principle. The agreement states that, "where there are threats of serious or irreversible environmental damage, lack of full scientific certainty shall not be used as a reason for postponing the development and implementation of standards."⁸⁰

⁷³ House of Commons Canada, Standing Committee on Environment and Sustainable Development, *Report: Harmonization of Environmental Protection: An Analysis of the Harmonization Initiative of the Canadian Council of Ministers of the Environment*, December 1997;

<http://www.parl.gc.ca/InfoComDoc/36/1/ENSU/Studies/Reports/ENSURP01-E.htm>

⁷⁴ Quebec indicated it still required certain conditions to be met before it would sign the Accord and Sub-agreements. For instance, Quebec would like Parliament to adopt amendments to federal legislation that recognize the need to reduce overlap and duplication between jurisdictions. See *ibid.*.

⁷⁵ Standing Committee on Environment and Sustainable Development, 1997, *op.cit.*

⁷⁶ CCME Website, "Guide to the Canada-Wide Accord on Environmental Harmonization"; http://www.ccme.ca/3ea_harmonization/3ea1_accord/3ea1a.html

⁷⁷ Standing Committee on Environment and Sustainable Development, 1997, *op.cit.* at 6.

⁷⁸ CCME, 1998, *op.cit.*

⁷⁹ http://www.ccme.ca/3e_priorities/3ea_harmonization/3ea2_cws/3ea2b.html

⁸⁰ http://www.ccme.ca/3e_priorities/3ea_harmonization/3ea2_cws/3ea2a.html

The Sub-Agreement "calls for governments to establish priorities for the development of CWSs and to allow for public involvement."⁸¹ The priority setting phase consists of three stages; nomination, screening, and selection.⁸²

In November of 1999, the ministers agreed on draft Canada-Wide Standards for four priority pollutants: particulate matter; ground-level ozone; benzene; and mercury.⁸³ Ministers agreed to take the standards back to their Cabinet colleagues, who have six months to consult on these before they are finalized and formally adopted at the CCME meeting in the spring of 2000.⁸⁴

Provincially, Ontario has posted three Notices of Proposal for Policy on its *Environmental Bill of Rights* Registry Web Site.⁸⁵ Particulate Matter and Ozone are combined in one proposal, while Benzene and Mercury each have their own proposal. Consultations are occurring in early 2000 (see Chapter 5 for more discussion of Ontario's air standards).

Currently, additional CWSs are under development for dioxins and furans; petroleum hydrocarbons; mercury from other sources; and benzene in air - Phase 2.⁸⁶

3.5.1.4 Funding

The CCME is organized, funded and operated consistent with the following principles: the core business is funded according to the CCME funding formula - Canada 1/3 and the remaining 2/3 divided among the other jurisdictions pro-rated to population.⁸⁷

If Ministers decide to take on issues in addition to those identified through the annual priority setting process or issues outside the core business, support is funded outside the formula, and partnerships are sought.⁸⁸

⁸¹ http://www.ccme.ca/3e_priorities/3ea_harmonization/3ea2_cws/3ea2d_public/3ea2d.html

⁸² *Ibid.*

⁸³ CCME, Environment Ministers Meet at Kananaskis, Kananaskis, Alberta, November 30, 1999; http://www.ccme.ca/1e_about/1eg_communique/1eg7.html See also Ontario Ministry of the Environment, *In Brief: Canada-wide Environmental Standards: Ontario's Role* (Toronto: Queen's Printer for Ontario, December 1999).

⁸⁴ *Ibid.*

⁸⁵ <http://www.ene.gov.on.ca/envregistry/012643ep.htm>. See also: Ontario Ministry of the Environment, *In Brief: Ontario and the Canada-wide Standards for Particulate Matter and Ground-level Ozone* (Toronto: Queen's Printer for Ontario, December 1999) at 1; for the Benzene (Phase 1) proposal, see Ontario EBR Registry Number "PA9E0014"; <http://204.40.253.254/envregistry/012642ep.htm>; and for Mercury, see Ontario EBR Registry Number PA9E0013; <http://204.40.253.254/envregistry/012641ep.htm>

⁸⁶ CCME, *Canada-wide Standards - Overview*; http://www.ccme.ca/pdfs/cws_bkgoverview_e.pdf

⁸⁷ http://www.ccme.ca/1e_about/1ed.html

⁸⁸ *Ibid.*

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