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North American Environmental Law and Policy



Commission for Environmental Cooperation of North America



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ISBN: 2-89451-623-1

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Legal Deposit - Bibliothèque nationale du Québec, 2003 Legal Deposit - Bibliothèque nationale du Canada, 2003

Disponible en français – ISBN: 2-89451-625-8 Disponible en español – ISBN: 2-89451-624-X

This publication was prepared by the Secretariat of the Commission for Environmental Cooperation of North America (CEC). The views contained herein do not necessarily reflect the views of the governments of Canada, Mexico, or the United States of America.

PROFILE

In North America, we share a rich environmental heritage that includes air, oceans and rivers, mountains and forests. Together, these elements form the basis of a complex network of ecosystems that sustains our livelihoods and well-being. If these ecosystems are to continue to be a source of life and prosperity, they must be protected. Doing so is a responsibility shared by Canada, Mexico, and the United States.

The Commission for Environmental Cooperation of North America (CEC) is an international organization created by Canada, Mexico, and the United States under the North American Agreement on Environmental Cooperation (NAAEC) to address regional environmental concerns, help prevent potential trade and environmental conflicts, and promote the effective enforcement of environmental law. The Agreement complements the environmental provisions of the North American Free Trade Agreement (NAFTA).

The CEC accomplishes its work through the combined efforts of its three principal components: the Council, the Secretariat and the Joint Public Advisory Committee (JPAC). The Council is the governing body of the CEC and is composed of the highest-level environmental authorities from each of the three countries. The Secretariat implements the annual work program and provides administrative, technical and operational support to the Council. The Joint Public Advisory Committee is composed of 15 citizens, five from each of the three countries, and advises the Council on any matter within the scope of the Agreement.

MISSION

The CEC facilitates cooperation and public participation to foster conservation, protection and enhancement of the North American environment for the benefit of present and future generations, in the context of increasing economic, trade and social links among Canada, Mexico and the United States.

NORTH AMERICAN ENVIRONMENTAL LAW AND POLICY SERIES

Produced by the CEC, the North American Environmental Law and Policy series presents some of the most salient recent trends and developments in environmental law and policy in Canada, Mexico and the United States, including official documents related to the novel citizen submission procedure empowering individuals from the NAFTA countries to allege that a Party to the agreement is failing to effectively enforce its environmental laws.

TABLE OF CONTENTS

Public Access to Government-Held Environmental
Information – Report on North American Law, Policy and Practice
Introduction
Canada
Mexico
United States
The Precautionary Principle in North American and
International Law
Introduction
Precaution in the Federal Legislation of the NAFTA Parties
Precaution in International Environmental Policy and United States Law and Practice 219

Public Access to Government-held Environmental Information

Report on North American Law, Policy and Practice

(Second Edition)

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INTRODUCTION

BACKGROUND TO THE REPORT

This is the second edition of a report first published by the Commission for Environmental Cooperation of North America (CEC) in the North American Environmental Law and Policy series in 1999. The report was originally commissioned by the CEC Secretariat in support of undertakings made by the CEC Council in October 1995, in a joint policy statement issued through Council Resolution 95-8, entitled Public Access to Environmental Information. The second edition fulfills a request to the Secretariat, made by Council at its June 2001 Regular Session, for a summary of confidentiality regulations in Canada, the U.S. and other countries, with a view to providing Mexico with examples in this area. The summary of confidentiality regulations, or "exceptions to disclosure", is found in the final section of each country report.

METHODOLOGY

The second edition of the report was prepared with the assistance of non-governmental legal consultants from each of the three countries with particular expertise in access to environmental information. The information provided is based on analysis of legislation and policy instruments, government reports and related literature, as well as interviews with government officials. Prior to publication, the draft report was distributed to the governments of the three countries for review and comment.

DISCLAIMER

This report, prepared by the CEC Secretariat with the assistance of non-governmental legal consultants, does not necessarily reflect the opinions or views of either the Parties or the CEC. The CEC wishes to make clear that although certain portions of the report may reference more recent developments, the report as a whole should be considered to be up-to-date only to 1 December 2001.

A NOTE REGARDING THE SECOND EDITION

The second edition of our report is being released at a time when all three countries are reviewing the ground rules on access to government-held information. In Canada, the 1983 *Access to Information Act* is undergoing a major reform. In Mexico, federal access to information legislation, briefly described in the Mexico section of this report, came into force on 12 June 2002. In the United States, concern for national security has led to some changes in access-to-information policy. At the same time, in all three countries, environmental laws are being adopted or amended to reflect commitments by governments to foster public participation in decision-making by facilitating access to relevant information.

Katia Opalka Legal Officer, Submissions on Enforcement Matters Unit Commission for Environmental Cooperation of North America

ACKNOWLEDGMENTS

The CEC wishes to acknowledge the many individuals and organizations who contributed to the completion of the second edition of this report. We wish to acknowledge the team of consultants who assisted in the update of the country reports as follows:

Canada: Canadian Environmental Law Association (CELA)

Paul Muldoon, Executive Director and Counsel Alan D. Levy, Member, Board of Directors Lisa McShane, Researcher and Librarian

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Mexico: Centro Mexicano de Derecho Ambiental (CEMDA)

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We further wish to acknowledge those who assisted the CEC by providing information and reviewing the draft reports.

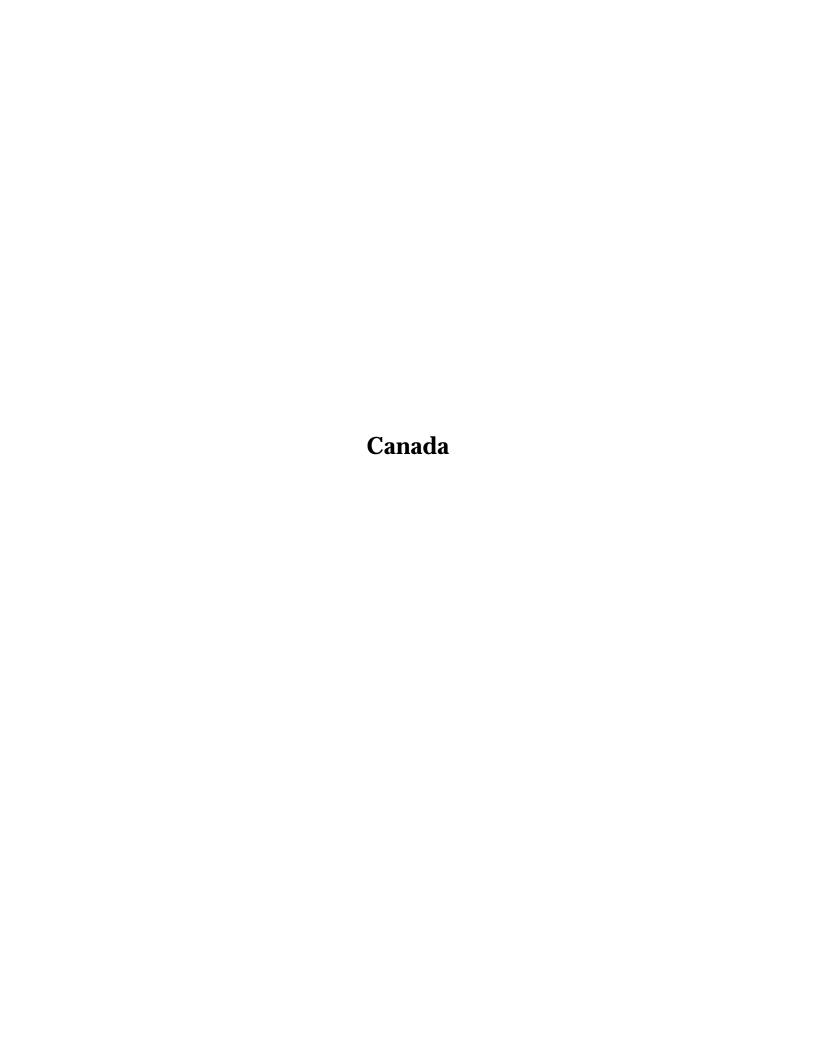


Table of Contents

1.		NSTITUTIONAL AND LEGAL FRAMEWORK R PUBLIC ACCESS TO INFORMATION					
	1.1	Introd	Introduction				
	1.2	Const	itutiona	l Framework			
	1.3		Overview of Federal Access Legislation, Policies and Practices				
		1.3.1	Access	to Information Act			
		1.3.2	Other I	Federal Access to Information Laws 22			
			1.3.2.1	Workplace Hazardous Materials Information System			
			1.3.2.2	Canadian Environmental Assessment Act			
			1.3.2.3	Canadian Environmental Protection Act, 1999			
			1.3.2.4	Pest Control Products Act 27			
			1.3.2.5	Official Languages Act 29			
		1.3.3		to Information Concerning Federal l Proceedings			
	1.4			Provincial Access Legislation, Policies			

		1.4.1 Freedom of Information and Protection of
		Privacy Act (British Columbia)
		1.4.2 Drinking Water Protection Legislation 34
		1.4.3 Access to Information Concerning Provincial Judicial Proceedings
2.		TRONMENTAL ASSESSMENTS OF PROPOSED JECTS
	2.1	Introduction
	2.2	Federal
	2.3	Provincial (Alberta)
3.	LICI	ENSES OR PERMITS FOR PROPOSED PROJECTS 42
	3.1	Introduction
	3.2	Federal
	3.3	Provincial (Ontario)
4.		POSED REGULATIONS, POLICIES, PROGRAMS D PLANS
	4.1	Introduction
	4.2	Federal
	4.3	Provincial (Ontario)
5 .	ENF	ORCEMENT AND COMPLIANCE ACTIONS 56
	5.1	Introduction
	5.2	Federal

	5.3	Provincial (British Columbia)	62
6.	NA	ΓΙΟΝΑL POLLUTANT RELEASE INVENTORY	63
7	EXC	CEPTIONS TO DISCLOSURE	65

1. CONSTITUTIONAL AND LEGAL FRAMEWORK FOR PUBLIC ACCESS TO INFORMATION

1.1 Introduction

This chapter contains an overview of Canadian law, policy and practice regarding public access to government-held environmental information. It begins with a review of relevant constitutional provisions followed by an introduction to federal and selected provincial access to information laws. Subsequent sections focus on five key sources of environmental information: environmental assessment, permitting, legislative and policy development, enforcement and compliance actions, and emissions inventories. Legislated limits on the right to access information are mentioned throughout the text and discussed in more detail at the end.

1.2 Constitutional Framework

The Constitution of Canada¹ grants lawmaking powers to two orders of government: Parliament and the provincial legislatures.² It gives each order of government exclusive legislative jurisdiction over certain subjects. Only Parliament, for example, can enact criminal law,³ while only the provincial legislatures can make laws in relation to property and civil rights in the provinces and matters of a merely local or private nature. Parliament can make laws in relation to all matters not specifically assigned to the provinces by the Constitution.

The environment is not included under the heads of legislative powers listed in the Constitution, presumably because it was not yet a topic of concern at the time of confederation. In the last decade, the courts have held that the environment is a diffuse subject that cuts across

^{1.} Constitution Act, 1982, being Schedule B to the Canada Act 1982 (U.K.), 1982, c. 11 [hereinafter "Constitution"].

^{2.} Canada's territories are created by federal statutes: the Yukon Act, R.S.C. 1985, c. Y-2; the Northwest Territories Act, R.S.C. 1985, c. N-27; and the Nunavut Act, S.C. 1993, c. 28.

 [&]quot;except the Constitution of Courts of Criminal Jurisdiction, but including the Procedure in Criminal Matters"; Section 91(27) of the Constitution Act, 1867 (U.K.), 30 & 31 Vict., c. 3.

many different areas of constitutional responsibility, some federal and some provincial, and that as a result jurisdiction is shared.⁴ The absence of a clear division of responsibilities in environmental matters has resulted in uncertainty regarding the limits of both federal and provincial powers to legislate in this area. Recently, the Supreme Court recognised that municipalities also have a role in environmental regulation.⁵

Just as both Parliament and the provinces can make laws in relation to environmental matters, both can legislate in the area of access to information. Their respective powers to legislate access rights are limited by the division of powers in the Constitution. The Constitution itself does not create an explicit public right to access government-held information.

The Canadian Charter of Rights and Freedoms recognises several rights and freedoms that have an *implied* access-to-information component.⁶ For example, the Charter declares that everyone has freedom of thought, belief, opinion and expression, including freedom of the press and other media of communication, as well as freedom of peaceful assembly and freedom of association. It can be argued that access to government-held information is in many cases a precondition to the exercise of these freedoms.

The *Charter* further provides that everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice. Fundamental justice could arguably be interpreted as guaranteeing the right of the public to participate in environmental decisions that put life, liberty or personal security at risk. This subsumes a right of access to environmental information. There have not yet been any rulings by Canadian courts, of which we are aware, identifying a constitutional right to access environmental information.

The Constitution requires certain jurisdictions, including Parliament, to print and publish their statutes, records and journals in both

See R. v. Hydro-Québec, [1997] 3 S.C.R. 213. See also Friends of the Oldman River Society v. Canada (Minister of Transport), [1992] 1 S.C.R. 3.

In 114957 Canada Ltée (Spraytech, Société d'arrosage) v. Hudson (Town of), [2001] 2 S.C.R. 241, the Court upheld a municipality's right to enact a by-law limiting the cosmetic use of pesticides on the basis that the provincial law of Quebec authorized local governments to enact general health bylaws.

^{6.} Part I of the Constitution [hereinafter *Charter*].

See M. Jackman, "Rights and participation: The use of the Charter to supervise the regulatory process" in (1990) 4 Can. J. Adm. L. & Pract. 23.

official languages. Under the *Charter*, any member of the public in Canada has the right to communicate with and receive available services from the head or central office of an institution of Parliament or the government of Canada in both English and French.

1.3 Overview of Federal Access Legislation, Policies and Practices

1.3.1 Access to Information Act

Legal Right of Access to Information

The federal *Access to Information Act* ("AIA")⁸ came into force in 1983 and is intended to complement existing procedures for accessing government information. Its purpose is to extend the laws of Canada to provide an enforceable right of access to information in records under the control of a federal government institution in accordance with the following principles: (i) government information should be available to the public; (ii) necessary exceptions to the right of access should be limited and specific; and (iii) decisions on the disclosure of government information should be reviewed independently of government. The Act and its administration are subject to review on a permanent basis by a committee of the House of Commons.

Under the AIA, all Canadian citizens, permanent residents and other individuals and corporations that are present in Canada must, upon request, be given access to any record-subject to the exceptions described below-under the control of a government institution. The Act defines "record" broadly to include any documentary material, regardless of physical form or characteristics. The AIA does not apply to published material or material available for purchase by the public,

^{8.} R.S.C. 1985, c. A-1.

^{9.} Ibid. at s. 4 and Access to Information Act Extension Order, No. 1, SOR/89-207. Government institutions subject to the AIA are listed in a schedule to the Act. Crown corporations are not subject to the Act. In response to public demands that it be included under the AIA and that its activities be subject to assessment under CEAA (see below, Section 2.2.), the Canadian Export Development Corporation ("CEDC") adopted an Environmental Review Directive and issued enhanced disclosure rules for environmental and social impacts of projects it is associated with, including notice and comment provisions. See online: CEDC http://www.edc.ca/corpinfo/csr/disclosure/enhanced_e.htm (date accessed: 4 March 2002).

^{10.} Compare the Quebec Act respecting access to documents held by public bodies and the protection of personal information, R.S.Q., c. A-2.1 [hereinafter the "Quebec AIA"], which also has a broad definition of record (it uses "document") but states that "[t]he right does not extend to personal notes written on a document or to sketches, outlines, drafts, preliminary notes or other documents of the same nature."

Cabinet confidences¹¹ and draft legislation. These categories of materials are said to be "excluded" from the application of the Act.

Access requests must be made in writing to the appropriate government institution. To help the public make these requests, the Act requires the minister in charge of the Act^{12} to produce a yearly publication describing the organization and responsibilities of each government institution along with a description of the classes of record under its control. The publication must also contain a list of manuals used by employees in carrying out the institution's programs and activities and provide the title and address of the person in charge of processing access requests. 13

Subject to certain exceptions and to the payment of applicable fees, the applicant receives a written response and is granted an opportunity to examine the record (or part thereof) or is given a copy thereof within thirty days of receipt of the request by the government institution.

The Act lists categories of information that are exempted from disclosure and in respect of which government institutions are either obliged or allowed to deny access requests. Included is information relating to international and federal-provincial affairs, national defense, law enforcement, the economic interests of Canada, personal information, information protected by solicitor-client privilege and third-party information. In certain cases where government institutions are given discretion regarding whether or not to disclose information, the decision not to disclose must be based on a reasonable apprehension of injury to the interests being protected. Any part of a record that does not contain exempted information and that can reasonably be severed from the rest must be disclosed.

When access is denied, the government institution must inform the applicant of the provision of the Act upon which it bases its refusal, but it is not required to tell the applicant whether the record actually exists.

^{11.} These include memoranda, discussion papers, agenda, records of deliberations, records reflecting communications between ministers of the Crown on matters relating to the making of government decisions or the formulation of government policy, and briefing notes; s. 69(1) of the AIA.

^{12.} The President of the Treasury Board is responsible for the administration of the Act.

^{13.} To meet this requirement, the federal government has created Info Source, a series of publications and databases containing information about the government, its organizations and information holdings, as well as information related to the AIA. Online: Treasury Board of Canada Secretariat http://infosource.gc.ca (last modified: 16 March 2001).

When access is not granted within the time limits set forth in the Act, access is deemed to have been denied.

Third parties, meaning anyone other than the applicant and the government institution, are given the right to be informed (if reasonably possible) and to consent or object when a government institution is considering disclosing information whose disclosure could be prejudicial to their interests. The head of the government institution may nevertheless disclose third-party information if it would be in the public interest to do so, as it relates to public health, safety or protection of the environment, but only if the public interest clearly outweighs potential harm to the financial interests of the third party. A government institution may not refuse to disclose that part of a third-party record which contains results of product or environmental testing carried out by or on behalf of a government institution. The head of a government institution cannot be prosecuted or sued for disclosing third-party information in good faith or for failing to give the required third-party notice if reasonable care was taken to give such notice.

The AIA creates the office of Information Commissioner to investigate complaints relating to requesting or obtaining access to records under the Act. The Commissioner holds office during good behavior and can be removed at any time on address of the Senate and House of Commons. When the Commissioner finds that a denial of an access request is unfounded and the government institution continues to deny access, the complainant, or the Commissioner on behalf of the complainant, can make an application to the Federal Court to force disclosure. Before the Court, the government institution has the burden of establishing that its refusal to grant access is authorized under the Act.

The power of the Commissioner and the Court to recommend the disclosure of documents is limited to "records to which this Act applies." This has been interpreted by a government institution to mean that the Commissioner and the Court lack power first, to review a decision to label a record a "Cabinet confidence" and then, to deny access on the basis that such confidences are excluded from the application of the Act. This interpretation was successfully challenged in court.¹⁴

^{14.} See *Information Commissioner of Canada* v. *Canada* (*Minister of the Environment*), 2001 FCT 277 (F.C.T.D.). In that case, the trial judge found that the government institution had improperly attempted to circumvent disclosure under s. 69(3)(b) of the AIA (discussion papers have to be released once the decisions to which they relate have been made public or four years have elapsed since the decisions were made) by including the content of discussion papers in Cabinet memoranda which are never subject to disclosure under the AIA. He ordered that the memoranda in question be reviewed for the purpose of determining whether the "discussion paper"

The head of each government institution and the Information Commissioner submit annual reports to Parliament on the administration of the AIA.

Access Policies

The AIA is administered by the Secretariat of the Treasury Board of Canada. The Treasury Board has published an *Access to Information Policy* and *Guidelines*, ¹⁵ and it recommends that these documents be read in conjunction with the *Management of Government Information Holdings Policy*, the *Privacy and Data Protection Policy*, the *Security Policy of the Government of Canada* and the *Communications Policy of the Government of Canada*.

The purpose of the *Access to Information Policy* is to set out requirements that must be met in order to ensure effective and consistent application of the AIA and its regulations across government institutions. It requires institutions to be able to account for all deliberations and decisions taken concerning each request. It also requires them to participate in a Coordination of Access to Information Requests ("CAIR") System and identify requests that may be interdepartmental in scope or involve government-wide legal or policy issues. The *Guidelines*, which are intended primarily for use by public servants, state that "[w]hile information may technically be in an exemptible category, it is government policy to release it when there is no need to withhold it" 16 and they cite a judicial decision ruling that "doubt ought to be resolved in favor of disclosure."

The *Communications Policy* requires subject institutions of the Government of Canada to respond promptly to information requests or inquiries from the public, without undue recourse to the AIA. It requires that prompt and clear explanations be provided when information

component could be severed and therefore disclosed as required by s. 25 of the AIA. See also Canada, 2000-2001 Annual Report of the Information Commissioner of Canada (Ottawa: Queen's Printer, 2001), c. 4–The Year in Review, "Stubborn Resistance"; online: http://www.infocom.gc.ca/reports/section_display-e.asp?intSectionId=137> (last modified: 31 July 2001).

Financial and Information Management Branch, Treasury Board Secretariat, Treasury Board Manual-Access to Information (Ottawa: Canada Communication Group, July 1994), online: http://www.tbs-sct.gc.ca/pubs_pol/gospubs/TBM_121/siglist_e.html (last modified: 8 March 2001). See also Info Source, supra, note 12.

^{16.} Section 1 of the Guidelines (as revised 1 December 1993).

^{17.} Maislin Industries v. Canada (Minister of Industry, Trade and Commerce) et al., [1984] 1 F.C. 939 (F.C.T.D.) at 942-43; s. 3 of the Guidelines.

requested by the public is unavailable, and that institutions make available to the public information on the standard of service an institution provides to the public, including timelines for responding to inquiries, mail and complaints. Institutions must provide information free of charge when such information is in their control and it (a) is needed by individuals to make use of a service or program for which they are eligible; (b) explains the rights, entitlements and obligations of individuals; (c) consists of personal information requested by the individual whom it concerns; (d) informs the public about dangers or risks to health, safety or the environment; (e) is required for public understanding of a major new priority, law, policy, program or service; or (f) is requested under the AIA and fees are waived at the discretion of the head of the institution. In addition, institutions must ensure that publications for sale are not comprised primarily of information that otherwise must be provided free of charge. 18

As a matter of policy, government institutions are encouraged to make information available for purchase by the public, especially where frequent access requests indicate a significant degree of public interest. Once it is available for purchase, information is no longer subject to the AIA and can only be accessed by paying the full price.¹⁹

Ease of Access

The AIA contains several potential obstacles to convenient public access to information. The first is that requests "must be made in writing to the governmental institution that has control of the record and shall provide sufficient detail to enable an experienced employee of the institution with a reasonable effort to identify the record." The onus is on the applicant to identify the record and its location. The Act does not impose an affirmative duty on government to assist access seekers in identifying

Policy requirements 1(g)-(i), 2 and 27(f) of the Communications Policy (in effect 1 April 2002), online: Treasury Board Secretariat http://www.tbs-sct.gc.ca/pubs_pol/sipubs/comm/comm1_e.html (date accessed: 29 August 2002).

^{19.} Guidelines issued by the Treasury Board Secretariat in cooperation with the Interdepartmental Working Group on Database Industry Support in 1991 support licensing governmental information to private sector vendors as a way of generating revenue, online: Treasury Board Secretariat http://www.tbs-sct.gc.ca/Pubs_pol/ciopubs/TB_OIMP/GUIWP_e.html (date accessed: 22 January 2002). For a discussion of government policy regarding cost recovery and market pricing in connection with the dissemination of information, see "Information Technology and Open Government" (Ottawa: Office of the Information Commissioner of Canada, 1994) at pp. 13 et seq., online: Office of the Information Commissioner of Canada http://www.infocom.gc.ca/publications/pdf_en/ogov_e.pdf (date accessed: 23 March 2002). See also s. 68(1) of the AIA.

and locating the appropriate records.²⁰ Furthermore, if a record is not available in the language spoken by the applicant, the head of the government institution is allowed to consider whether it would be in the public interest to have the document translated, instead of being required to have a translation prepared on request. The same is true of a record that is not available in an alternative format required by someone with a sensory disability: the record will be converted to an alternative format only if the head of the government institution considers it reasonable to do so.

In his 2000-2001 report to Parliament, the Information Commissioner identified four key areas in which access to information programs could be improved. On an administrative level, he recommended increased funding of access to information programs and a greater emphasis on staff training. He also recommended that all departments develop access procedures containing the fewest possible steps for processing requests. Finally, he suggested that senior department personnel should be made responsible for the success of access programs and for encouraging all staff to have a positive attitude toward complying with the requirements of the AIA.²¹

Timeliness

Delays in the processing of access requests have increased over the years. In 2000-2001, the Information Commissioner received 1,680 complaints, representing a gradual increase to nearly double the figure of a decade ago. Almost half of the complaints concerned delays.²²

Affordability

The application fee is \$5.00. Additional fees may be charged for costs associated with document reproduction, and there is a fee of \$2.50 for every quarter hour in excess of five hours that is reasonably required by employees of the governmental institution to search for the record and prepare it for disclosure. The fee for photocopying is \$0.20 per page and for microfiche to paper duplications, \$0.25 per fiche. The Informa-

^{20.} Compare s. 44 of the Quebec AIA which states that "[t]he person in charge must lend assistance in drafting a request and identifying the document requested to any applicant who requires it."

Canada, 2000-2001 Annual Report of the Information Commissioner of Canada (Ottawa: Queen's Printer, 2001); c. 1–Restoring the Foundations of Accountability, "Why do these problems persist?" and "Solving the Problems", online: Information Commissioner of Canada http://www.infocom.gc.ca/reports/2000-2001t-e.asp (last modified: 31 July 2001).

^{22.} Ibid.

tion Commissioner has recommended reviewing the fee structure to reflect lower costs associated with computer searches. 23

Access to Information Task Force

In August 2000, the President of the Treasury Board and the Minister of Justice created a government Access to Information Review Task Force whose mandate is to conduct a sweeping review of the AIA and its administration through internal and public consultations.²⁴ Written submissions were invited.²⁵ The Task Force's report is expected to be released in the spring of 2002.

The Information Commissioner made a number of recommendations to the Task Force regarding potential amendments to improve the AIA, including closing gaps in coverage of the AIA and creating incentives for timely responses and penalties for failing to meet response deadlines. His principal recommendation was to transform the Cabinet confidences exclusion into a focused exemption subject to independent review. He indicated that he was drawing on recommendations found in his 2000-2001 Report to Parliament, many of which date as far back as 1986.

Government representatives that regularly work with industry told the Task Force that protection of third-party confidential information needs to be improved if industry is to be expected to disclose such information to government.²⁷

The Task Force's homepage is at http://www.atirtf-geai.gc.ca/home-e.html (last modified: 15 August 2001).

Canada, Speech by the Information Commissioner to the External Advisory Committee of the Access to Information Review Task Force (Ottawa: 26 June 2001), online: Information Commissioner of Canada http://www.infocom.gc.ca/speeches/speechview-e.asp?intspeechId=58> (last modified: 31 July 2001).

 Canada, Access to Information Review Task Force, Public Service Consultations, Consultation–Financial and Commercial Information (16 March 2001), online: Access to Information Review Task Force http://www.atirtf-geai.gc.ca/consultation2001-03-16b-e.html (date accessed: 18 January 2002).

^{23.} Ibid. at 67.

^{25.} None of the submissions published on the Task Force's website relate specifically to access to environmental information, although two submissions related to access to information about the activities of the Canadian International Development Agency and the Export Development Corporation in connection with projects that have significant environmental impacts. Background materials released for the public consultations indicate that in 1999-2000, there were no environmental institutions among the ten institutions having received the most access requests under the AIA; Canada, Access to Information Review Task Force, Access to Information Review-Consultation Paper (30 March 2001) Annex A; online: Access to Information Review Task Force http://www.atirtf-geai.gc.ca/consultation 2001-03-30-e.html> (last modified: 15 August 2001).

The Department of Fisheries and Oceans and other departments asked to be included in the list of investigative bodies whose investigation records are exempt from disclosure pursuant to Section 16(1)(a) of the AIA.²⁸ They claim that since their records are currently subject to disclosure pursuant to access to information requests, other government institutions are loathe to share with them information that would be helpful in pursuing enforcement activities.

1.3.2 Other Federal Access to Information Laws

1.3.2.1 Workplace Hazardous Materials Information System

The Workplace Hazardous Materials Information System ("WHMIS") is a combination of federal and provincial laws designed to guarantee workers' right to know about the potential dangers of hazardous materials and products found in the workplace. The WHMIS includes three main sets of requirements: labeling, disclosure by means of material safety data sheets ("MSDSs") and worker training and education. The federal *Hazardous Products Act* and associated *Controlled Substances Regulations* require importers, manufacturers, processors and sellers to warn of the hazardous nature of such products and materials.²⁹ Provincial and territorial legislation and the *Canada Labour Code* require employers to ensure that hazardous materials are appropriately labeled, that MSDSs are readily available to workers and that workers are educated and trained to handle hazardous materials safely.

The *Hazardous Materials Information Review Act* sets out a mechanism for claiming confidentiality in respect of information required to be disclosed under the *Hazardous Products Act*.³⁰ The Hazardous Materials Information Review Commission processes such claims using prescribed regulatory criteria.

1.3.2.2 Canadian Environmental Assessment Act

The *Canadian Environmental Assessment Act* ("CEAA"), which sets out additional means of access to environmental information at the federal level, is discussed below, in Section $2.^{31}$

Canada, Access to Information Review Task Force, Public Service Consultations, Consultation–Security, Defense and Law Enforcement Information (20 February 2001), online: Access to Information Review Task Force http://www.atirtf-geai.gc.ca/consultation2001-02-20-e.html (date accessed: 18 January 2002).

^{29.} R.S.C. 1985, c. H-3.

^{30.} R.S.C. 1985, c. 24 (3rd Supp.), Part III.

^{31.} S.C. 1992, c. 37.

1.3.2.3 Canadian Environmental Protection Act, 1999

The Canadian Environmental Protection Act, 1999 ("CEPA")³² replaces the 1988 Canadian Environmental Protection Act ("CEPA 1988"). CEPA covers a range of subject matters under federal jurisdiction, with a focus on contributing to sustainable development through pollution prevention, primarily by reducing releases and in certain cases eliminating the presence of toxic and other harmful substances in the environment by means of cooperation with other governments and aboriginal people, public education, research, and voluntary and regulatory initiatives.³³ Every year, the Minister of the Environment must report to Parliament on the Act's administration and enforcement. The Act and its administration are subject to comprehensive review by a parliamentary committee every five years.

CEPA is discussed below in Section 4 on Proposed Regulations, Policies, Programs and Plans; Section 5 on Enforcement and Compliance Actions; and Section 6 regarding the National Pollutant Release Inventory. Certain provisions of CEPA relating specifically to gathering and disseminating information on toxic substances and the state of the environment are discussed below.

CEPA gives the federal Minister of the Environment authority to require private persons and companies to test, and provide the government with information about and samples of, substances they import, export, manufacture, transport, process, distribute, use and release into the environment. Some of these requirements are found in regulations, others take the form of a notice published in the *Canada Gazette*, ³⁴ while

^{32.} S.C. 1999, c. 33.

^{33.} The Act has twelve parts: 1 Administration; 2 Public Participation; 3 Information Gathering, Objectives, Guidelines and Codes of Practice; 4 Pollution Prevention; 5 Controlling Toxic Substances; 6 Animate Products of Biotechnology; 7 Controlling Pollution and Managing Wastes; 8 Environmental Matters Related to Emergencies; 9 Government Operations and Federal and Aboriginal Land; 10 Enforcement; 11 Miscellaneous Matters; 12 Consequential Amendments, Repeal, Transitional Provisions and Coming Into Force.

^{34.} The Canada Gazette is published in French and in English under the authority of the Statutory Instruments Act (R.S.C. 1985, c. S-22). Part I is published every Saturday and contains all formal public notices, official appointments, miscellaneous notices and proposed regulations from the government and private sectors that are required to be published by a federal statute or a regulation. Part II is published every second Wednesday and contains regulations as defined in the Statutory Instruments Act, and certain other classes of statutory instruments. Part III is published as soon as is reasonably practicable after Royal Assent and contains the most recent Public Acts of Parliament and their enactment proclamations. The cost of a yearly subscription is \$135.00 for Part I, \$67.50 for Part II and \$28.50 for Part III. The Canada Gazette is also available on the Internet at Government of Canada http://canada.gc.ca/gazette/gazette_e.html> (last modified: 29 October 2001).

others are mailed directly to designated persons and companies. The Minister uses this information, *inter alia*, to publish a Domestic Substances List, Non-Domestic Substances List, Priority Substances List, Toxic Substances List, Virtual Elimination List and Export Control List. As the names of the lists suggest, the Act mandates the Minister to identify substances present in Canada and then prioritize them for assessment and possible regulation, with the objective of virtually eliminating the most toxic substances from the Canadian environment. The lists themselves, as well as substance assessment reports and decisions on follow-up actions are published in the *Canada Gazette*.

Persons required by notice to provide information may apply for extensions or waivers. Notice of waivers must be published in the *Canada Gazette*. The Act protects confidential business information by allowing substances to be identified using masked names and by allowing requests for confidentiality, subject to a limited public interest override. The public interest override does not extend to information protected from disclosure under the *Hazardous Materials Information Review Act* (see above, Section 1.3.2.1).

The Act allows members of the public to request priority assessment of a substance. The public can also object to delays in assessing substances and to a decision that a substance should not be added to the Toxic Substances List. When a substance has been added to the Toxic Substances List, 35 CEPA gives the Minister authority to require the preparation of pollution prevention plans and environmental emergency plans in connection with the substance. While the Act does not require such plans to be filed with the Minister, he has the power to require them to be submitted to him for review. Subject to the exceptions to disclosure stipulated in the AIA (see below, Section 7), such plans would then be subject to public disclosure pursuant to an access to information request.

Under CEPA, the Ministers of Health and the Environment have the power to make interim orders in relation to substances they believe to be toxic or substances on the Toxic Substances List that they believe are not adequately regulated, in circumstances where they believe that immediate action is required to deal with a significant danger to the environment or to human life or health. The order ceases to have effect after 14 days unless it is approved by the Governor in Council after consultation with affected governments and other federal ministers. Notice of the order must be published in the *Canada Gazette* within 90 days of approval by the Governor in Council, and no one can be convicted of

^{35.} And in other circumstances described in the Act.

contravening an order prior to such publication, unless the Crown can prove that such person had been notified of the order. In response to the events of 11 September 2001, draft legislation has been tabled in Parliament that would extend this order power to other substances in cases of environmental emergencies. ³⁶ The exercise of this new power would not be subject to the requirement to report to Parliament on its administration. Furthermore, the proposed legislation would make such interim orders exempt from publication in the *Canada Gazette*.

Besides publishing information on substances, CEPA requires reporting on the state of the environment. The last state of the environment report produced under CEPA 1988 was published in 1996.³⁷ Since then, only issue-specific reports have been released, on topics such as sustainable agriculture and forest health. CEPA requires the Minister to conduct research, gather data and publish, through an information clearinghouse,³⁸ information on pollution prevention, pertinent information on all aspects of environmental quality, and a periodic report on the state of the Canadian environment. The Minister must also establish, operate and maintain a system for monitoring environmental quality.

In October 2000, a multi-stakeholder task force was created by Environment Canada to assess the availability of environmental information in Canada and make recommendations for government action. In its report, released in October 2001, the task force concluded that Canada lacks environmental information and that the information that does exist is not effectively integrated and disseminated.³⁹

^{36.} Bill C-55, The Public Safety Act, 1st Sess., 37th Parl., 2002 (1st reading 29 April 2002),

^{37.} Canada, *State of Canada's Environment: 1996* (Ottawa: Environment Canada, 1996); online: Environment Canada http://www.ec.gc.ca/report_e.html (last modified: 15 January 2002).

See the Canadian Pollution Prevention Information Clearinghouse, online: Environment Canada http://www3.ec.gc.ca/cppic/en/index.cfm (last modified 23 March 2002).

^{39.} The report notes that the 2001 Environmental Sustainability Index ranks Canada 25th in the world in the availability of environmental information, well behind leaders such as the Netherlands, Norway and the United States which have been more successful in mounting a cooperative, integrated approach to the collection and dissemination of environmental information; Canada, Sharing Environmental Decisions: Final Report of the Task Force on a Canadian Information System for the Environment (CISE) (Ottawa: Minister of Public Works and Government Services, October 2001), online: Environment Canada https://www.ec.gc.ca/cise/eng/reports.cfm (last modified: 4 November 2001). The conclusions and recommendations reproduced herein are drawn from the "Summary of Task Force Recommendations" and from Section 1, "The Case for Better Environmental Information". See also Annex 4-Environmental Information in World Economic Forum

The task force bemoaned the fact that Environment Canada has stopped reporting on the state of the environment and noted that past reports suffered from a lack of current data, a lack of data that was geospatially complete across Canada, lack of standardization of information across jurisdictions and lack of long-term data on which to base indicators and subsequent reporting. Long-term data sets that did exist were not relevant to contemporary policy issues. The report also indicated that Canada has no comprehensive system for measuring success in achieving environmental policy goals and implementation of international environmental commitments. As a result, Canadians are not in a position to evaluate government performance in this area. The same is true of the ability of Canadians to monitor corporate environmental performance, since corporate environmental reporting is not centrally accessible, varies across companies and is rarely subject to third-party review.⁴⁰

Canada's principal weaknesses were identified as being a lack of environmental information resulting from reduced government monitoring and the absence of a strategic approach to collecting and disseminating information. The report lists environmental health, climate change, and biodiversity as urgent priority areas requiring improved quality, integration and reporting of information. It recommends establishing a Canadian Information System for the Environment ("CISE") that would contain environmental data to support a national set of sustainable development indicators, data to support environmental indicators, continuous reporting on the state of the environment and the state of the government's environmental management system, and means for setting environmental priorities and promoting community awareness and involvement in environmental matters. It also recommends establishing a Canadian Institute for Environmental Information to promote collective priority-setting, the use of common standards, and the public's use of the CISE.

Global Leaders of Tomorrow Environmental Task Force (Annual Meeting), 2001 Environmental Sustainability Index (Davos: January 2001) at 57, online: Center for International Earth Science Information Network http://www.ciesin.org/indicators/ESI_01a.pdf (date accessed: 22 January 2002).

^{40.} See, however, Canada, Environmental Protection Expenditures in the Business Sector, 1998 (Ottawa: Statistics Canada, 2001), online: Statistics Canada http://www.statcan.ca/english/freepub/16F0006XIE/16F0006XIE98001.pdf (date accessed: 4 February 2002), which presents operating and capital expenditures made by primary and manufacturing industries in response to, or in anticipation of, environmental regulations and conventions.

1.3.2.4 Pest Control Products Act

The federal *Pest Control Products Act* and related regulations govern the production and registration of pesticides.⁴¹ The legislation requires that pesticides toxic to plants and animals be registered, conform to certain specified safety standards, and be properly labeled and packaged before they can be imported, exported or sold.

The Pest Management Regulatory Agency ("PMRA") was established in 1995 to consolidate federal pest management regulations and to oversee the Pest Management Information Service, a toll-free national telephone and e-mail service. It provides information about pest control products and categories and use of pesticides, and it undertakes research. It also responds to inquiries about the pesticide registration process in Canada, product labels, safety precautions, possible preventative measures and alternative pest management practices. The PMRA also maintains a website. In formation is not provided about non-active ingredients in pesticides, nor is proprietary or confidential business information made accessible. In 2000, the PMRA proposed a *Formulants Policy* which, if adopted, could provide some information about non-active ingredients of particular concern. 43

In May 2000, the House of Commons Standing Committee on Environment and Sustainable Development issued a report recommending enhanced public participation and access to information about pesticides.⁴⁴ In responding to the report, the government agreed that "addressing the availability of information for the public and other government departments, and the opportunity for consultation on regulatory decisions is a key area that could benefit from legislative change," but stated that until then, existing disclosure restrictions were a legal limitation to providing greater access to information.⁴⁵

^{41.} R.S.C. 1985, c. P-10.

^{42.} The PMRA's homepage is http://www.hc-sc.gc.ca/pmra-arla/ (last modified: 22 October 2001). For additional information, see the website of Responsible Pest Management (http://www.pestinfo.ca> (date accessed: 23 April 2002)), sponsored by the Federation of Canadian Municipalities and Environment Canada.

^{43.} Canada, Pest Management Regulatory Agency, Formulants Policy (29 May 2000), online: Health Canada http://www.hc-sc.gc.ca/pmra-arla/english/pdf/pro/pro2000-04-e.pdf> (date accessed: 18 January 2002).

^{44.} Canada, House of Commons Standing Committee on the Environment and Sustainable Development, *Pesticides: Making the Right Choice for the Protection of Health and the Environment* (Ottawa: Queen's Printer, 2000), online: Parliament of Canada http://www.parl.gc.ca/InfoComDoc/36/2/ENVI/Studies/Reports/envi01-e.html> (date accessed: 22 January 2002).

Canada, Government Response to the Report of the House of Commons Standing Committee on the Environment and Sustainable Development, Pesticides: Making the Right

Draft legislation that would replace *Pest Control Products Act* was tabled in Parliament by the Minister of Health on 21 March 2002 ("Bill 53"). Bill 53 aims to improve public access to information about pest control products and public involvement in the regulation of these products.

Bill 53 provides for a register of pest control products "to be made available to the public in as convenient a manner as practicable" as well as an electronic public registry containing information included in the register and other specified information.

Under Bill 53, persons whose interests and concerns are affected by the Act can be invited to sit on an advisory council reporting to the Minister. The Minister must also consult the public whose interests and concerns are affected by the federal regulatory system before making certain decisions. Thus, the Minister must publish a consultation statement along with supporting materials, receive and consider written comments, and summarize comments received in a subsequent decision statement. The public must be consulted as to policies, guidelines and codes of practice relating to the regulation of pest control products.

Members of the public can request a special review of a pest control product and are entitled to be given reasons supporting the Minister's decision regarding whether or not to undertake such a review. Members of the public can file a notice of objection in connection with certain permitting decisions of the Minister and other matters, and the Minister may then establish a review panel, whose hearings are open to the public. Information submitted to a review panel and review panel reports must be placed in the register. After receiving a review panel report, the Minister must make public his or her decision along with reasons therefor and a summary of information considered by the Minister.

Bill-53 provides for the protection of confidential test data and confidential business information, subject to certain limitations. Thus, the Minister can grant access to confidential test data to anyone who requests it provided that confidentiality is maintained and that the information will not be misused. The Bill contains a special definition of confidential business information and gives the Minister the final say regarding whether information is confidential business information for the purposes of the Act. Finally, the Bill sets out specific persons and bodies to whom the Minister can disclose confidential test data and con-

Choice for the Protection of Health and the Environment (Ottawa: Queen's Printer, 2000), online: Health Canada http://www.hc-sc.gc.ca/pmra-arla/english/pdf/hlawns/hl-GovtResp-e.pdf (date accessed: 22 January 2002).

fidential business information. Generally, disclosure is allowed for the purpose of protecting human health, safety or the environment, for the purpose of honoring agreements with other governments or international organizations (subject to verifying that the recipient can ensure an equal level of protection of the information), and in order to facilitate the work of the advisory council and review panels.

1.3.2.5 Official Languages Act

The Official Languages Act requires that much information held by the federal government be made available in both English and French. 46 Federal institutions must ensure that any member of the public can communicate with, and obtain available services in either official language from, its head or central offices located in the National Capital Region, or elsewhere in Canada where there is significant demand.

1.3.3 Access to Information Concerning Federal Judicial Proceedings

Laws constituting the Federal Court of Canada and the Supreme Court of Canada state that these courts are to be open to the public and that court documents are to be available to the public. The Criminal Code of Canada provides that criminal proceedings are to be in open court unless the court directs otherwise in the interests of public morals, the maintenance of public order or the proper administration of justice. In the Federal Court, any person may, subject to appropriate supervision and when the facilities of the Court permit, inspect any Court file and obtain a copy on payment of a fee at the rate of \$0.40 per page. Rules relating to pre-trial production of documents and discovery of witnesses, as well as cross-examination of witnesses at trial, enable litigants to obtain information from other parties to the case. Decisions of both the Federal Court and the Supreme Court of Canada are available on the Internet in both official languages. Once a case is closed, Court documents are deposited at the National Archives and are available for access by the public.

1.4 Overview of Provincial Access Legislation, Policies and Practice

Once the Prince Edward Island *Freedom of Information and Protection of Privacy Act* comes into force,⁴⁷ all Canadian provinces will have

^{46.} R.S.C. 1985, c. 31 (4th Supp.).

^{47.} It received Royal Assent on 15 May 2001, and was expected to come into force within a year.

laws similar to the AIA (see above, Section 1.3.1). As with the AIA, these laws give the public the right to access government-held information subject to a number of exclusions and exemptions that are broadly similar to those under the federal legislation.

Alberta, British Columbia, Ontario and Saskatchewan have information commissioners with an independent watchdog function similar to the federal Information Commissioner, while in Quebec there is a five-member Access to Information Commission (*Commission de l'accès à l'information*). In Manitoba and New Brunswick the provincial ombudsman is responsible for access to information complaints. In Newfoundland, the reviewing officer is a judge of the Supreme Court of Newfoundland, while in Nova Scotia, the reviewing officer is either appointed by Cabinet or is a judge of the Supreme Court.

Ontario and Saskatchewan have separate statutes governing access to information held by municipal governments, while other provinces, such as British Columbia and more recently, Manitoba, include a right to access information held by municipal governments in the statute that applies to the provincial government.

Most provincial access to information laws grant "any person" a right to access government-held information. Local residency or other connections with the province do not appear to be required. Newfound-land, however, limits access to Canadian citizens and landed immigrants. The statute does not appear to preclude the use of agents who are Canadian citizens or landed immigrants to request the desired information. The *British Columbia Freedom of Information and Protection of Privacy Act* is discussed in detail below as an example of a well-developed provincial access to information regime.

1.4.1 Freedom of Information and Protection of Privacy Act (British Columbia)

Legal Right of Access to Information

Enacted in 1992, the *British Columbia Freedom of Information and Protection of Privacy Act* ("FOIPPA") is similar to the AIA in that it grants a broad right of access subject to limited exceptions.⁴⁸

^{48.} R.S.B.C. 1996, c. 165.

As with the AIA, FOIPPA requires an applicant to make a written request to the public body that the applicant believes has custody or control of a record. The head of a public body must make every reasonable effort to provide assistance to applicants and respond to each request without delay, openly, accurately and completely. The Minister is required to publish a directory of records held by provincial public bodies to assist the public in identifying and locating records. ⁴⁹ Like the AIA, FOIPPA requires a public body to create a record from a computer file as long as it can be created from a machine readable record, involves normal computer hardware and expertise, and doing so will not unreasonably interfere with its operations.

Public bodies must supply requested information without delay and not later than 30 days after the request is received. Extensions of this deadline are limited to specific situations and to an additional 30-day period, unless a longer period is approved by the Information and Privacy Commissioner. The Commissioner is an officer of the provincial legislature with responsibility for monitoring the administration of FOIPPA and conducting investigations and audits to ensure compliance.

Cabinet confidences are excepted⁵⁰ under FOIPPA but are not excluded as under the AIA. A public body cannot refuse to disclose such records if they have been in existence for 15 or more years and must disclose information in the record of a Cabinet decision on an appeal under an act, as well as background documents if the decision to which they relate has been made public or implemented, or if five years have passed since the decision was made or considered.

There are discretionary exceptions for policy and legal advice, personal information, information relating to intergovernmental relations or negotiations, the financial or economic interests of public bodies, and business interests of third parties. Public bodies are also permitted to refuse to disclose information whose disclosure could reasonably be expected to result in damage to or interference with the conservation of natural or heritage sites or of endangered or rare species of animals and plants.

This directory was Internet accessible but is no longer available online: Office of the Information and Privacy Commissioner for British Columbia http://www.oipcbc.org/site_list.html> (date accessed: 28 January 2002).

^{50.} An "exception" under the B.C. legislation is like an "exemption" under the AIA: in both cases, the government body can decide to deny disclosure, but the applicant can ask for a review of that decision by the information commissioner.

Unlike the AIA, FOIPPA allows the public interest to override all exceptions.⁵¹ Disclosure is required where there is a risk of significant harm to the environment or to the health or safety of the public or a group, or where disclosure of the information would clearly be in the public interest.

In 1997, a Special Committee of the Legislature was established to review FOIPPA. In July 1999, it made eighteen recommendations for improving the Act. To date, only two have been addressed. These relate to updating FOIPPA to cover officials and public bodies established since the Act's introduction.⁵²

Access Policies

British Columbia government policy on access to information is outlined in a *Policy and Procedures Manual*, available on the Internet, which is updated as changes are made. The manual states that the Act should not "limit in any way" the routine release of information and that a formal freedom of information request should be a last resort when the applicant has been unable to access records through routine avenues.⁵³ The Commissioner has published a series of guides on different topics such as the appeals process and has begun to publish a quarterly newsletter as well. These are available on the Internet.

Ease of Access

The Special Committee report indicates that contrary to the government's intent, informal access to information has decreased since the introduction of FOIPPA. The Commissioner's 1999-2000 annual report addressed this issue, strongly urging public bodies to routinely release as much information as possible, ideally using the Internet, in order to advance the Act's goals of openness and accountability while reducing the cost of compliance. Only excepted information should be withheld.

^{51.} Under the AIA, the public interest override only applies to disclosure of third-party information that is confidential or whose disclosure could have financial consequences for, prejudice the competitive position of, or interfere with contractual or other negotiations of a third party.

^{52.} British Columbia, Special Committee to Review the Freedom of Information & Protection of Privacy Act, Report (3rd session, 36th Parliament) (15 July 1999) [hereinafter "Special Committee"], online: British Columbia Legislature http://www.legis.gov.bc.ca/cmt/36thParl/foi/1999/review_act.htm (date accessed: 18 January 2002).

British Columbia, Ministry of Management Services, *Policy and Procedures Manual*, online: British Columbia Ministry of Management Services http://www.mser.gov.bc.ca/FOI_POP/manual/ToC.htm> (last modified: 22 November 2001).

Timeliness

Serious delays in response time have been reported by environmental groups, the Commissioner and the Special Committee. Responses frequently take as long as four to six months, and even up to a year. The problem seems to be caused by increased demand coupled with cutbacks to freedom of information program budgets. There is also concern that requests dealing with sensitive issues and those made by environmental groups or the media are taking longer to process.

The Commissioner's 1999-2000 Annual Report remarks on the delay problem, stating that "access delayed is access denied." ⁵⁴ The Commissioner has warned that "the delays we are finding with some public bodies threaten to become a systemic barrier to the right of access." ⁵⁵ The Special Committee recommended waiving fees when response timelines are not met, but to date there has been no government response to this proposal.

Affordability

A schedule to the FOIPPA lists maximum search and copying fees. Public bodies may charge less than the maximum fee or charge no fee at all. The first three hours of a search are free. Maximum searching fees are \$7.50 per quarter-hour thereafter. The maximum fee for copies of printed material is \$0.25/page. Computer diskettes are \$10 each.

In response to a request filed by an environmental group in 1996 for access to geographic information system ("GIS") forest data, the British Columbia government proposed to charge \$600 per file, or \$30,000 total. Applicants applied for relief to the Commissioner on the ground that the price charged by the government blocked access to information

^{54.} British Columbia, 1999-2000 Annual Report of the Information and Privacy Commissioner for British Columbia at 13, online: Office of the Information and Privacy Commissioner for British Columbia http://www.oipcbc.org/publications/annual/oipcbc_annual_report_99-2000.pdf> (date accessed 23 January 2002).

^{55.} British Columbia, 2000 Annual Report of the Information and Privacy Commissioner for British Columbia at 8, online: Office of the Information and Privacy Commissioner for British Columbia http://www.oipcbc.org/publications/annual/oipcbc-annual_report2000.pdf> (date accessed: 2 April 2002).

^{56.} Office of the Information and Privacy Commissioner for British Columbia, Inquiry re: A decision by the Ministry of Environment, Lands and Parks to withhold Digital Map Data from the Western Canada Wilderness Committee, Order No. 91-1996 (11 March 1996); online: Office of the Information and Privacy Commissioner for British Columbia http://www.oipcbc.org/orders/Order91.html> (date accessed: 18 January 2002).

required for environmental and First Nations groups to participate effectively in land use negotiations with government and industry.

The Commissioner found that the government's decision was lawful but unfair. He urged the government to consider implementing a two-tiered pricing system that would charge non-profit groups lower fees in recognition of the public interest nature of their work. According to one environmental group, the government has continued to charge high fees and to otherwise restrict access to this type of data. The group has been given access to GIS and other digital data through a mediated process overseen by the Commissioner, but not all data requested has been made available.

Despite this important, unresolved issue, the Special Committee concluded that the existing fee structure strikes a good balance between public access rights and administrative cost recovery and recommended no changes.

1.4.2 Drinking Water Protection Legislation

In April 2001, British Columbia enacted the *Drinking Water Protection Act*,⁵⁷ requiring public notice of threats to drinking water and the publication of water suppliers' emergency response and contingency plans and drinking water monitoring results. The Ontario government also enacted new public drinking water information requirements in August 2000 as part of its new *Drinking Water Protection Regulation*.⁵⁸ Measures such as these address an important gap in past practices.

1.4.3 Access to Information Concerning Provincial Judicial Proceedings

Court hearings are normally open to the public unless a court orders the public to be excluded because of a risk of serious harm or injustice to any person. Most provinces prohibit photography, video and audio recordings, as well as live coverage of court proceedings, except in limited circumstances as ordered by the court. The Supreme Court of Canada recently decided that it will hear an appeal from British Columbia television stations alleging that the British Columbia Supreme Court's policy against allowing television coverage of court proceedings

^{57.} S.B.C. 2001, c. 9.

^{58.} Ont. Reg. 459/00.

is unconstitutional as violating freedom of expression guaranteed by the $\it Charter. ^{59}$

In Ontario, on payment of prescribed fees, a person is entitled to see and obtain a copy of any document filed in a court proceeding unless a law or an order of the court provides otherwise. 60 However, a court can order that any document filed in a civil proceeding before it be treated as confidential, sealed and not form part of the public record. 61

2. ENVIRONMENTAL ASSESSMENTS OF PROPOSED PROJECTS

2.1 Introduction

This section offers a brief overview of laws, policies and practices that govern public access to environmental assessment information. We will review CEAA (see Section 1.3.2.2, above) and the Alberta *Environmental Protection and Enhancement Act* ("EPEA").⁶²

2.2 Federal

Legal Right of Access to Information

CEAA came into force in January 1995. It is administered by the Canadian Environmental Assessment Agency ("Agency"). The federal Minister of Environment must report annually to Parliament on the activities of the Agency and the administration and implementation of the Act. The report must contain a statistical summary of all environmental assessments conducted or completed under the authority of the Act during that year. The Minister must also review the Act's provisions and operation within five years of its coming into force. A review was conducted in 2000 and proposed amendments to the Act were tabled in Parliament in early 2001. 63 Proposed amendments relevant to access to environmental information are summarised below, after a description of the current rules under the Act.

BCTV v. R., leave to appeal to the Supreme Court of Canada granted 17 January 2002, Supreme Court of Canada Docket No. 28823. See also R. v. Pilarinos and Clark, [2001] B.C.S.C. 1332.

^{60.} Courts of Justice Act, R.S.O. 1990, c. C-43, Part 7-"Public Access", s. 137(1) and (4).

^{61.} Ibid. at s. 137(2).

^{62.} S.A. 1992, c. E-13.3.

^{63.} Bill C-19, An Act to Amend the Canadian Environmental Assessment Act, 1st Sess., 37th Parliament, 2001 [hereinafter "Bill C-19"], online: Canadian Environmental Assessment Agency http://www.ceaa.gc.ca/0007/0001/bill_e.htm (last modified: 1 September 2001).

CEAA governs environmental assessment of projects involving the federal government. CEAA is "triggered" when an initiative falls within the definition of "project" under the Act and the project, for example, requires the exercise of a federal regulatory power (such as issuing an authorization), is being carried out by a federal authority, is located on federal land, or is financed with federal funds. Depending on the nature of the project, it will be subject to either a screening or a more comprehensive type of assessment. All assessments must consider comments received from the public. Under the Act, the federal agency or department most closely associated with the project is the "responsible authority" and it must ensure that the requirements of the Act are met. Since there are as many potential "responsible authorities" as there are federal government bodies subject to the Act, administration of CEAA has been inconsistent, including as regards provision of information to the public. ⁶⁴

The Preamble of the Act states that the government is committed to facilitating public participation in the environmental assessment of projects and providing access to the information on which environmental assessments are based. The Act requires that a public registry of relevant records be established for each project and prescribes notice and comment procedures aimed at incorporating the concerns of the public into the assessment process.

Registries must be established and operated in a manner to ensure convenient public access. They must be open to the public throughout the duration of the assessment. The requirement that public access to the registries be "convenient" means that access to documents via a registry should, in principle, be preferable to using the AIA. 65

The Act prescribes that registries must contain all records produced, collected or submitted with respect to the environmental assessment, including records that have otherwise been made available to the public, records that have been requested through the AIA and are subject to disclosure under that act,66 and records that the responsible authority believes on reasonable grounds would be in the public interest to disclose because they are required in order for the public to participate

^{64.} See Five-year Review Team, Canadian Environmental Assessment Agency, "Background Study on the Public Registry and Federal Environmental Assessment Index (Final Report)" by T. Shillington (31 March 1999); online: Canadian Environmental Assessment Agency http://www.ceaa.gc.ca/0007/0002/0002/bkstd11_e.htm (last modified: 1 September 2001).

^{65.} The operation of registries in practice is discussed below, under *Ease of Access*.

^{66.} Including through application of the public interest override for third-party information found at s. 20(6) of the AIA; see above, Section 1.3.1.

effectively in an assessment, except for records containing third-party information. Records proposed for inclusion in a public registry are normally "cleared" through the AIA to ensure that no exempted or excluded information is disclosed.⁶⁷

Notice and comment procedures are prescribed for each type of assessment. In a screening, when a responsible authority is of the opinion that public participation would be appropriate under the circumstances, it must give the public notice and an opportunity to examine and comment on screening reports and on any record that has been filed in the public registry [emphasis added] before taking a course of action.68 The Agency is also required to notify the public of comprehensive studies and provide an opportunity to examine and comment on comprehensive study reports and supporting documents. In a panel review, the panel is required to ensure that the information it reviews is made available to the public and it must hold its hearings in public so long as no harm is likely to come to a witness as a result of the disclosure of information in a public hearing. The Minister of the Environment must make a report from a panel review or a mediator available to the public and must advise the public that the report is available. Finally, the Minister is required to provide reasonable public notice of, and a reasonable opportunity for anyone to comment on, draft guidelines, codes of practice, criteria or orders respecting the application of CEAA or draft federal-provincial or international agreements or arrangements respecting environmental assessments.

Bill C-19 would change the nature of the CEAA registry system in several respects. Notably, project-based registries would be replaced by an electronic registry to be maintained by the Agency, and the length of time documents would be posted on the registry would be at the Agency's discretion. Most important, though, the description of the information that must be posted on the registry would change significantly.

First, the public interest test mentioned above would be eliminated. Instead, the responsible authority or the Agency (in the case of a comprehensive study or panel review) could post information it consid-

^{67.} For a description of information excluded and exempted from disclosure under the AIA, see Section 1.3.1, above, and Section 7, below.

^{68.} See Canadian Environmental Assessment Agency, "Review of the Canadian Environmental Assessment Act—A Discussion Paper for Public Consultation" (December 1999), s. 2(5)—"Summary of Environmental Assessments", online: Canadian Environmental Assessment Agency http://www.ceaa.gc.ca/0007/0002/0001/index_e.htm (last modified: 1 September 2001).

ers "appropriate." No criteria of "appropriateness" are provided. Second, while Bill C-19 contains a long list of documents that must be posted on the registry, 69 the umbrella phrase "all records produced, collected or submitted with respect to the environmental assessment" currently found in the Act is dropped. 70 Removal of this catchall risks narrowing the scope of disclosure. At least one environmental group has urged that the registry provisions of the Act not be amended, or that provisions for an electronic registry be added to already existing provisions in the Act. 71

Bill C-19 would also modify notice and comment procedures prescribed for the different types of assessments. Under Bill C-19, the requirement to give the public notice of a screening or comprehensive study would be dropped. Without the notice requirement, it is not clear how the public would become aware that it has an opportunity to comment. In the case of a screening, the public would no longer be able to comment on any document other than the screening report, but the responsible authority would have discretion to offer opportunities to comment at any stage of the screening. Regarding panel reviews, Bill C-19 would add a criterion for barring disclosure of information in a public hearing: the panel could order a hearing closed if disclosure of information were likely to result in "specific harm to the environment."

Access Policies

The principal policy document setting out the Agency's interpretation of the requirements of CEAA is the *Canadian Environmental Assessment Act Procedural Manual* ("Manual"), a set of reference materials designed to provide guidance on the application of CEAA to federal government departments and agencies, provincial and municipal governments, private sector proponents of projects requiring federal funding or decisions, and members of the public interested in environmental assessment. The Manual contains a *Responsible Authorities Guide* that instructs responsible authorities on their duties under the Act. It contains several reference guides, including a guide on the public registry system ("Registry Guide"). These are available on the Agency's website.⁷²

^{69.} The current list contains six items while Bill C-19 contains eighteen items.

^{70.} Compare s. 55(3) of CEAA and proposed s. 55(2) contained in cl. 26 of Bill C-19.

^{71.} M. Kostuch, "Bill C-19: An Act to amend the Canadian Environmental Assessment Act" (Submission to the House of Commons Standing Committee on the Environment and Sustainable Development, 6 January 2002).

^{72. &}lt;a href="http://www.ceaa.gc.ca">http://www.ceaa.gc.ca (date accessed: 24 January 2002).

Ease of Access

Access to environmental assessment and related information is hampered by the nature and operation of the CEAA registry system and by budgetary constraints limiting the number and training of government personnel responsible for managing the registries.

A 1999 independent review of responsible authorities' public registry operations, part of the five-year review of CEAA, found wide disparities in compliance with registry requirements. Some departments list information in centralized databases while others only create document lists upon request. The authors of the study encountered divergent views within government regarding whether the registries should serve to foster public participation in environmental assessment or whether they simply serve to provide information on request.

Departments reported very low public interest in the registries, but those responsible for the independent review remarked that judging by the number of visits to the Agency's Federal Environmental Assessment Index ("FEAI") website, there seems to be significant public interest in information surrounding environmental assessments. They concluded that there is insufficient data to determine whether the failure of the public to use the registries results from lack of public interest, lack of awareness, or lack of ability to access the registries. They suspect there is a connection between government's failure to publicize the registries and the public's failure to use them.

The authors note that many responsible authorities are not clear on the difference between the registries and FEAI. FEAI was designed by the Agency to act as a window for the public to obtain summary information on all pending assessments. The public is expected to seek additional information from the individual responsible authorities. Because the FEAI system is voluntary, not all responsible authorities are represented. Some prefer to use their own websites to list project information because of cumbersome procedures associated with transferring information to the FEAI. Others feel that posting summary information on the FEIA fulfills their registry obligations. In addition to being incomplete, FEAI is reported to contain out-of-date information. Lack of sufficient and timely information makes it difficult for the public to determine whether it is worth attempting to obtain access to a document.

^{73.} Supra, note 58 at s. 9.3.

Timeliness

The Registry Guide encourages responsible authorities to provide access to requested documents within ten days of the request or, under certain circumstances, within thirty days. If processing the request will take more than thirty days, the extension must be authorized by the applicant. Priority is given to persons wanting to participate in a formal public participation process under the Act.

Affordability

Fees are \$0.20 a page for hardcopy, \$0.40 per microfiche and \$10.00 per computer diskette. Where the total fee is \$25.00 or less, the fee is waived. Documents prepared for the purpose of consulting with the public during a consultation period are provided free of charge.

2.3 Provincial (Alberta)

Legal Right of Access to Information

The Environmental Protection and Enhancement Act ("EPEA") governs environmental assessment of projects falling under provincial legislative jurisdiction in Alberta. EPEA requires that the Director, an official designated by the Department of Environment, establish and maintain a register containing documents and other information provided to or issued by the Director in the context of an environmental assessment. This requirement is consistent with Alberta's Freedom of Information and Protection of Privacy Act, which gives the public the right to access Head of Public Body documents without having to make an access request. The EPEA Environmental Assessment Regulation ("Regulation") lists documents and information that must be included in the register.⁷⁴

The *Regulation* requires the publication of newspaper notices at various stages of an environmental assessment and allows members of the public to register their concerns and thereafter receive direct notice of decisions related to the assessment. Proponents must publish a notice in a newspaper approved by the Director informing the public of the proposed project and of the proposed terms of reference for the environmental impact assessment. The notice must indicate where the docu-

^{74.} Alta. Reg. 112/93.

ment may be inspected and state that persons wishing to provide written comments on the proposed terms of reference may provide them to the Director.⁷⁵ Proponents must make proposed terms of reference available for inspection during business hours, and must also provide a copy to any person who requests it.

Ease of Access

Under the *Regulation*, people can examine any information or document contained in the register during normal business hours. The *Regulation* does not prescribe the format of the register. Fandard practice is to enter environmental assessment information into an electronic database located at the Department of Environmental Protection's Edmonton office but not accessible online. Alberta Environment's website contains a summary of the register and links to websites of project proponents.

The EPEA *Disclosure of Information Regulation* stipulates that requests for information must be made "in a form acceptable to the Director" and must contain the name, mailing address and telephone number of the person making the request and the details of the document or information requested. If the Director is of the opinion that the document or information has already been provided to a group, organization, association or other body of which the person is a member or with which the person is otherwise affiliated, the Director may refuse to grant access.

Timeliness

Under the Disclosure of Information Regulation, access and copies must be provided "within a reasonable time after a request in writing."

^{75.} In Quebec, the *Environment Quality Act*, R.S.Q., c. Q-2 ("EQA") requires that environmental impact assessment statements be made public and requires project proponents to trigger a public information and consultation process in which persons, groups and municipalities can request a public hearing in connection with the project before a commission appointed by the *Bureau d'audiences publiques sur l'environnement*. Requests for a hearing must be granted unless they are frivolous. The *Bureau* reports on its findings to the Minister. The Government is not bound by the recommendations of the *Bureau* in deciding whether to authorize a project (see Division IV.1 of the EQA and Division IV of the *Regulation respecting environmental impact assessment and review*, R.R.Q., c. Q-2, r. 9).

^{76.} The Minister has discretion to disclose information in any form and manner the Minister considers appropriate; s. 2.1 of the *Disclosure of Information Regulation* (Alta. Reg. 116/93).

Affordability

Under the *Regulation* and subject to the *Disclosure of Information Regulation*, a person may obtain one copy of any document contained in the register free of charge. Environmental impact assessment reports are available from proponents free of charge.

Canada-Alberta Agreement for Environmental Assessment Cooperation

The governments of Canada and Alberta have entered into an agreement to harmonize the conduct of environmental assessments that are subject to both CEAA and EPEA.⁷⁷ This agreement does not provide for merging the registries of the two jurisdictions. It states that the Parties will maintain public registries in accordance with the requirements of their respective legislation.

3. LICENSES OR PERMITS FOR PROPOSED PROJECTS

3.1 Introduction

Instruments by which the government authorizes individuals or corporations to carry on activities that can or do have environmental impacts are a valuable source of environmental information. Materials filed in support of permit applications often contain detailed information about industrial facilities, manufacturing processes and environmental risks associated with the applicant's activities. Under certain statutes, the public is given an opportunity to access these materials and submit comments that a permitting authority must take into account in deciding whether to grant or renew a permit. The permits themselves often contain specific environmental conditions that are used to regulate the permit-holder's behavior much in the same way as a regulation. When added to other publicly-accessible information, access to permit information helps the public determine whether a facility is in compliance and whether the government is effectively enforcing applicable environmental laws.

^{77.} The Canada-Alberta Agreement for Environmental Assessment Cooperation was finalized in June 1999; online: Canadian Environmental Assessment Agency http://www.ceaa.gc.ca/0009/0001/0003/0001/0001/alta_agr_e.htm (last modified: 1 September 2001). British Columbia, Saskatchewan and Manitoba have entered into similar agreements with the federal government.

In this section we review public rights to access permit information under several federal statutes as well as under the Ontario *Environmental Bill of Rights* ("EBR").⁷⁸

3.2 Federal

Legal Right of Access to Information

The principal federal statute giving the public the right to access environmental information for the purpose of influencing the permitting process is CEAA (see above, Section 2.2). CEAA's *Law List Regulations* enumerate some 190 approval powers granted to federal authorities under statutes related to subjects such as fisheries, navigable waters, the Yukon and Northwest Territories, Indian reserves, nuclear facilities, oil and gas pipelines, national parks, migratory birds, and railways. ⁷⁹ Before exercising one of these powers, a federal authority must clear the project through CEAA, which includes making information about the project available to the public through the CEAA registry system (see above, Section 2.2).

Other federal acts also allow the public to participate in permitting decisions affecting natural resources. For example, under the *Northwest Territories Waters Act*, the Northwest Territories Water Board is required to hold public hearings with respect to certain types of license applications and has discretion to hold hearings for others.⁸⁰ The Board must give notice of license applications and public hearings in newspapers and the *Canada Gazette*. The Board is also required to maintain a public register containing prescribed information relating to each license. The Act requires that the public register be open for inspection by any person upon payment of a fee during the Board's normal business hours.

Under the *National Energy Board Act*, the National Energy Board ("NEB") must hold public hearings before issuing a natural gas export license.⁸¹ Regulations under the Act list detailed public information requirements. Although CEAA is not triggered by export license applications, the NEB has determined that it has authority to examine environmental effects associated with natural gas export projects.⁸² The NEB's *Rules of Practice and Procedure* contain detailed notice and com-

^{78.} Environmental Bill of Rights, 1993, S.O. 1993, c. 28.

^{79.} SOR/94-636.

^{80.} S.C. 1992, c. 39.

^{81.} R.S.C. 1985, c. N-7.

^{82.} CEAA is triggered by other applications under the Act, including applications to divert or relocate a pipeline, abandon an operation, build over other utility lines, and build facilities across pipelines.

ment provisions.⁸³ Notices of pending hearings are published in newspapers with wide distribution. Members of the public are entitled to intervene as parties to a hearing, subject to the NEB's discretion. The NEB generally requires license applicants to provide copies of all documents to interveners as they are produced. The Board must submit an annual report on its activities to Parliament.

Regarding access to information about permits that have already been issued, the principal federal statute is the AIA (see above, Section 1.3.1).

Part II of CEPA (see above, Section 1.3.2.3), entitled "Public Participation," requires the establishment of an Environmental Registry to facilitate access to documents relating to matters under the Act, including notice of any approval granted under the Act. Disclosure of documents on the Registry is subject to the AIA. The Minister is given discretion regarding the form of the Registry, how it is to be kept and how access is provided. The Minister and any person acting on behalf of or under the direction of the Minister are given immunity from criminal and civil suits for disclosure of information in the Registry in good faith or any consequences of such disclosure.

Access Policies

The Northwest Territories Water Board has developed several policies and practices to facilitate access to information related to license applications. Applications and associated documents and transcripts of Board hearings are available at the Board's Yellowknife head office. Notice of applications for certain types of licenses for projects outside the Yellowknife area is provided in local newspapers, while local aboriginal or public interest organizations are notified by letter. Further, key documents are translated into local aboriginal languages.

The NEB's *Guidelines for Filing Requirements* require early public notification of licence applications.⁸⁵ License applicants must implement a public information program explaining the proposed project and its potential environmental and social effects, and must allow adequate time for public comment and response thereto. This program must be described in the license application submitted to the NEB.

^{83.} SOR/95-208

^{84.} The Registry can be accessed at: http://www.ec.gc.ca/CEPARegistry/default.cfm (date accessed: 23 March 2002).

 ⁽²² February 1995), online: National Energy Board http://www.neb-one.gc.ca/pubs/gdfilreq.htm#Part II (date accessed: 18 January 2002).

Ease of Access

A key barrier to access to information held by the Northwest Territories Water Board is the fact that it serves a small population scattered over a very large expanse of land. As noted above under *Access Policies*, the Board has undertaken several measures to improve access.

The quasi-judicial nature of the NEB means that information generally flows through formal channels. The NEB encourages interveners to consider being represented by lawyers and in practice, most are. Lawyers help to obtain copies of relevant information and interpret it for the benefit of their clients, but their involvement makes the process expensive. In addition, the amount of information routinely sent to interveners by project applicants can be overwhelming.

Timeliness

The Northwest Territories Water Board publishes a newspaper notice of a water license application within one to two weeks of receipt of the application. Delays associated with providing public access to information about applications are minimal. Before the NEB, project applicants have every interest in providing timely information to interveners and so timeliness is normally not an issue.

Affordability

The Northwest Territories Water Board charges no fees for providing access to water license applications or related environmental information but there is a charge for photocopying.

The NEB lacks the authority to award costs against a license applicant, so interveners participate in hearings at their own expense. However, interveners receive information related to export license applications from the project proponent and the NEB at no charge.

3.3 Provincial (Ontario)

Legal Right of Access to Information

Proclaimed in 1994, the *Environmental Bill of Rights* ("EBR") has the effect of, among other things, expanding the public's right to access information relating to permitting decisions of most ministries in the Ontario government.

The EBR sets out minimum levels of public participation that must be met before thirteen prescribed ministries of the Ontario government make policy or permitting decisions or adopt new legislation or regulations. "Instruments" ⁸⁶ are classified by regulation and this classification determines the required level of notice and public participation.

A minister is required to do everything in his or her power to give public notice of an instrument application under consideration in his or her ministry at least thirty days before making a decision. Notice is given online on the Environmental Registry established under the EBR and through other appropriate means.⁸⁷ In emergencies, decisions can be made without notice if waiting would result in danger to the health and safety of any person, harm or serious risk of harm to the environment, or injury or damage or the serious risk of injury or damage to any property. Notice must then be given as soon as reasonably possible thereafter.

Any Ontario resident has the right to appeal permit decisions issued by the primary regulatory ministries.⁸⁸ Any two Ontario residents may apply to the Environmental Commissioner of Ontario ("ECO") for a review of a permitting decision by the appropriate minister.

The ECO was established under the EBR as an officer of the Legislative Assembly. The ECO's role is to oversee implementation of and compliance with the EBR. The ECO reports on ministerial compliance in placing notices on the Environmental Registry, reviews use of the Registry by the public and reviews the exercise of ministers' discretion under the EBR. The ECO is required to report annually to the Speaker of the Legislative Assembly and can, of his or her own initiative, submit special reports to the Speaker. The Assembly can direct the ECO to perform special assignments as well. To date, there have been six annual reports, four special reports, and no special assignments.

^{86.} An "instrument" means any document of legal effect issued under an act, including permits, licenses, approvals, authorizations, directions and orders, but not including regulations (see s. 1(1) of the EBR). Regulations made under the EBR can specify that a particular document or class of documents is an "instrument" or a "regulation" for the purpose of this provision (s. 121(1)(c) of the EBR).

^{87.} See also s. 118.5 of the Quebec *Environment Quality Act*, R.S.Q., c. Q-2, concerning the requirement for the Quebec Minister of the Environment to establish a register of permit applications, permits, environmental impact statements, etc. Section 118.5 states that the information contained in the register is public information.

^{88.} In Quebec, the *Environment Quality Act* ("EQA") provides for public notice and comment in connection with the issuance of "depollution attestations," a type of environmental operating permit in which contaminant discharge standards are set on a facility-by-facility basis, taking into account impacts on the receiving

Access Policies

The Environmental Registry was launched in August 1994 as an electronic bulletin board, accessible through free dial-up computer access. Since then, it has undergone a number of technological improvements and in April 1998, it became available through a more user-friendly website interface. 89 The most recent improvement was in March 2001, when Registry notices were made available as a single database file for downloading. This allows users to sort or filter Registry data according to their own needs.

Online help is provided for searching the database, and there is a published *Guide to the Registry* along with a range of fact sheets on specific EBR issues called *Econotes*. There is also a toll-free phone number for assistance with accessing the Registry or finding particular postings.

Ease of Access

Ease of public access to the Registry was greatly enhanced when it was moved to the Internet, particularly because users are now linked directly to further information and the full text of documents related to postings.

While access to the Environmental Registry has improved over time, there are still factors that can impede access to information. The first is that the usefulness of the Registry is dependent on the quality of postings. Postings have become more user-friendly over time, but permit applications continue in many cases to be unclear, to contain too much or too little information or to be too technical. Every year, the ECO's annual report reiterates the need for postings to contain relevant, well-organized information in plain language, with clear explanations of technical terminology, contact information, and direct links to further information on the Internet where available. Several annual reports have included examples of understandable descriptions.

environment. So far, facilities in the pulp and paper, mineral, and primary metal transformation industries are required to apply for such attestations, with more industries to be added by government decree over time. The EQA does not give the public the right to appeal a decision to issue such an attestation, but when the Minister refuses to issue, amends, suspends or revokes an attestation and the proponent appeals to the Administrative Tribunal of Québec, any person, group or municipality may intervene before the Tribunal (ss. 31.20, 31.21, 96, and 98.1-100 of the EQA).

The Environmental Registry homepage is at http://www.ene.gov.on.ca/envi-sion/env_reg/er/registry.htm (date accessed: 22 January 2002).

In 2001, the ECO published a special report criticizing the Ontario Ministry of Natural Resources for failing to classify its instruments as required by the EBR. 90 Because the instruments were not classified, they were not subject to comment, review and appeal rights under the EBR. The Ministry of Natural Resources subsequently addressed this issue by promulgating Ontario Regulation 261/01, which came into force on 1 September 2001.

One obstacle to improving the operation of the Registry has been that while the ECO receives user feedback on its operation, the Registry is managed by the Ministry of the Environment.

Timeliness

The EBR minimum 30-day comment period for proposed instruments has been criticized as being too short for informed comment to occur in many cases. The ECO has complained that ministries are ignoring the spirit of the EBR by only granting the minimum comment period even when the circumstances surrounding a particular instrument application call for a much longer comment period.

Sometimes ministries require the public to file access to information requests to obtain copies of materials filed in support of instrument applications. Since access legislation gives the ministry thirty days to respond to a request, the public often has little or no time to review the information before the expiry of the thirty-day EBR comment period. The Information and Privacy Commissioner of Ontario has called this practice inappropriate.⁹¹ In the past, the Ministry of the Environment indicated that it was developing a policy on this matter, but none has been published and the problem continues.⁹²

Ministries are often late in posting decision notices on the Registry. For example, the Ministry of the Environment once waited one-and-

^{90.} Ontario, *Broken Promises: MNR's Failure to Safeguard Environmental Rights* (Special Report to the Legislative Assembly of Ontario, submitted by Gord Miller, Environmental Commissioner of Ontario, 21 June 2001), online: Environmental Commissioner of Ontario http://www.eco.on.ca/english/publicat/sp04.pdf (date accessed: 18 January 2002).

^{91.} Information and Privacy Commissioner of Ontario, *Order PO-1688 / Appeal PA-980244-1 / Ministry of the Environment* (16 June 1999) at 27, online: Information and Privacy Commissioner of Ontario http://www.ipc.on.ca/english/orders/orders-p/po-1688.htm> (date accessed: 18 January 2002).

^{92.} D. McRobert, "The Nuts and Bolts and the Rest of the Machinery" (Insight Publications, 2001).

a-half years before making a controversial permitting decision public. Late notification compromises the public's right of appeal.⁹³

Affordability

It is Ontario Government policy to provide free access to the Environmental Registry for residents of Ontario. The Registry can be accessed on the Internet. Free Internet access is now available in almost all public libraries.

4. PROPOSED REGULATIONS, POLICIES, PROGRAMS AND PLANS

4.1 Introduction

Legislative and policy instruments as well as government programs and plans can have significant environmental impacts. This is true not only of environmental laws and programs but also as regards initiatives in areas such as finance, taxation, health, agriculture and transport. In this section, we review public rights to access information used by governments to make decisions about proposed legislation, policies, programs and plans as well as rights to access the drafts of such documents. We also discuss environmental assessment of such proposals. At the federal level, CEPA (see above, Section 1.3.2.3) and the Commissioner for the Environment and Sustainable Development have enhanced public access to environmental information. In Ontario, the EBR (see above, Section 3.3) is meant to give the public access to environmental information underlying policy and law reform.

4.2 Federal

Legal Right of Access to Information

Under the AIA, the public has no right to access confidential information used as the basis for drafting federal legislation and policy documents, nor is it entitled to access drafts of legislation and government policies (see above, Section 1.3.1).94 Specific statutes do grant such rights, however.

^{93.} Having Regard, 2000-2001 Annual Report of the Environmental Commissioner of Ontario to the Legislative Assembly of Ontario, online: Environmental Commissioner of Ontario http://www.eco.on.ca/english/publicat/ar2000.pdf (date accessed: 18 January 2002).

However, this information is subject to disclosure once it has been in existence for twenty years.

Under CEPA, the Minister is required to publish in the *Canada Gazette* a copy of every order or regulation proposed to be made under the Act, as well as any instrument proposed to be adopted in connection with the regulation of a toxic substance. Within sixty days after such publication any person can file comments with the Minister or file a notice of objection requesting the establishment of a board of review. In addition, subject to the AIA, the Minister must post copies of all notices of objection and of every policy and proposed regulation or order on the Environmental Registry (see above, Section 3.2).

CEPA contains many provisions stating that the Minister *shall* consult with provincial and aboriginal government representatives and *may* consult with industry and the public at large regarding the development of objectives, standards and guidelines. The right of the public to participate in the formulation of policy instruments is therefore weaker than it is in the context of regulation- or order-making because the Minister is not required to accept comments from the public and the public has no statutory right of appeal from the Minister's decision.

The Act gives the Minister various information-gathering powers, including for the purpose of formulating objectives and codes of practice and issuing guidelines. Persons subject to an information-gathering notice published in the *Canada Gazette* can invoke a number of grounds to have the information kept confidential, but the Minister can override such a request where the public interest in disclosure outweighs any prejudice to financial and privacy interests.

To ensure that sustainable development considerations are integrated into the development of federal government programs and plans, the *Auditor General Act* was amended in 1995 to create a Commissioner of the Environment and Sustainable Development ("CESD"). The CESD reports directly to the Auditor General on the success of federal government departments in implementing their sustainable development strategies. The Auditor General's role now includes giving due regard to the environmental effects of expenditures. The introduction of the CESD increases the profile of environmental indicators relative to economic indicators as measures of government performance. The CESD is required to report annually to Parliament on behalf of the Auditor General on the environmental performance of federal government departments. 96

^{95.} R.S.C. 1985. c. A-17.

^{96.} Canada, 1998-2001 Reports of the Commissioner of the Environment and Sustainable Development to the House of Commons, online: Office of the Auditor General of Canada http://www.oag-bvg.gc.ca/domino/cesd_cedd.nsf/html/menu3_e.html (date accessed: 18 January 2002).

The CESD oversees a little-used process under which federal departments are required to formally respond to environmental petitions from residents of Canada. The process is meant to result in public and timely responses to issues of concern. According to the CESD 2001 Report, the process was instrumental in securing a commitment from Health Canada to reassess the allowable trichloroethylene ("TCE") limit in the *Canadian Drinking Water Guidelines* and from Environment Canada to regulate TCE under CEPA by 2001.⁹⁷

Access Policies

The federal government's *Regulatory Policy* provides that once Cabinet approval has been secured, draft regulations which might affect Canada's obligations under trade agreements should be published in Part I of the *Canada Gazette* for several months to allow for public comment prior to being finalized. In practice, other draft regulations may be published as well, but the requirement to publish them was dropped in a 1999 revision of the *Policy*.

The *Regulatory Policy* formerly required a regulatory impact analysis statement ("RIAS") to be published along with draft regulations. Public consultation is one part of a RIAS. The RIAS requirement has been dropped from the *Policy* but is still found in the 2001 *Guide to the Regulatory Process*. It is unclear whether the government intends to stop doing RIAS for draft regulations.

In practice, federal government departments may undertake public information and consultation exercises prior to drafting regulations or other documents that will be submitted to Cabinet. Environment Canada lists such consultations on its website in accordance with its policy statement entitled "Our commitment to effective consultations," which sets out Environment Canada's policy on public participation in the development and amendment of policies, legislation, programs and services, including through participant funding.⁹⁸ In December 2001, it released for public comment a discussion paper and supporting documents regarding the implementation of the "precautionary approach" in government decision-making.⁹⁹ The recent CEAA five-year review

^{97.} Ibid. at Appendix A-Summary of Current Petitions Received or Pending (1 January 2000–15 July 2001), Petition No. 25 filed 11 October 2000 by Sierra Legal Defence Fund on behalf of the Beckwith Water Contamination Committee.

^{98. (27} May 1996), online: Environment Canada http://www.ec.gc.ca/consult/policy_e.html (last modified: 27 February 2001).

^{99.} Online: http://www.ec.gc.ca/econom/pp_e.htm (last modified: 26 November 2001). The precautionary approach recognizes that the absence of full scientific certainty should not be used as a reason to postpone decisions when not acting could result in serious or irreversible harm.

process is another example of a public consultation initiative launched prior to proposing amendments to an act (see Section 2.2, above).

Environmental assessment provides another means for informing the public about the environmental implications of proposed legislation and policy instruments. The 1999 Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals ("Directive") requires strategic environmental assessment of proposals whose implementation could result in important environmental effects, either positive or negative. 100 It states that environmental assessment should contribute on an equal basis with economic or social analysis and that the level of effort put into the analysis should be proportionate to the significance of anticipated environmental effects. Public involvement is strongly encouraged.

In a 1998 audit of an earlier version of the *Directive*, the CESD reported widespread noncompliance with the *Directive*. The CESD's 2000 Report noted no improvement in compliance despite a 1999 update of the *Directive*. Information about assessments, where they are conducted, is rarely made available to the public. ¹⁰¹ Two obstacles to compliance with the *Directive* are a refusal by government departments to disclose information that is a Cabinet confidence, ¹⁰² and the absence of a positive duty on government departments and agencies to promote, monitor and publicly report on compliance with the *Directive*.

Since 1997, information about proposed federal regulations must be included in reports which are filed by each federal agency and department with Parliament every spring regarding its plans and priorities. Results of regulatory initiatives are published in annual departmental performance reports released in the fall of each year. 103

^{100.} Canadian Environmental Assessment Agency (1999), online: Canadian Environmental Assessment Agency http://www.ceaa.gc.ca/0011/0002/dir_e.htm (last modified: 1 September 2001). See also Guidelines for Implementing the Cabinet Directive (2000), online: Canadian Environmental Assessment Agency http://www.ceaa.gc.ca/0011/0002/dir_e.htm (last modified: 1st September 2001).

^{101.} See *CESD Reports to Parliament* (1998) c. 6 and (2000) c. 9, online: Office of the Auditor General of Canada http://www.oag-bvg.gc.ca/domino/cesd_cedd.nsf/html/menu3_e.html (date accessed: 18 January 2002).

^{102.} See s. 1.3.1, above, for a definition of Cabinet confidences.

^{103.} Treasury Board of Canada Secretariat, *Improved Reporting to Parliament Project* (1997), online: Treasury Board Secretariat http://www.tbs-sct.gc.ca/tb/estimate/irppe.html (last modified: 5 September 2001). The Treasury Board makes reports from all government departments available on its website; online: Treasury Board of Canada Secretariat http://www.tbs-sct.gc.ca/rma/database/access/dflex.asp?id=39&lang=E (last modified 4 February 2002).

Ease of Access

Virtually all draft regulations are published in Part I of the *Canada Gazette* along with a RIAS. The *Canada Gazette* is available at libraries across Canada, through print subscriptions and through the Internet. The volume and scope of the *Canada Gazette* make it time-consuming to use as a means of staying up-to-date on environmental laws and policies. Companies often rely on industry associations and commercial publications to notify them when draft legislation and policies that could affect them are published in the *Canada Gazette*. Others rely on the press, public information campaigns by non-governmental organizations and government websites to provide that service.

Timeliness

Time frames for public comment on draft regulations published in Part I of the *Canada Gazette* are typically 60 or 90 days.

Affordability

The *Canada Gazette* can be accessed at no cost on the Internet and at public or university libraries.

4.3 Provincial (Ontario)

Legal Right of Access to Information

The EBR gives the public notice and comment rights relating to proposed regulations, policies, programs and plans (see Section 3.3, above, for an introduction to the EBR).

When a minister considers that a proposal for a regulation could, if implemented, have a significant effect on the environment, the EBR requires that he or she do everything in his or her power to give notice of the proposal on the Registry (see Section 3.3, above, regarding the Environmental Registry). The minister has discretion to do so with regard to proposed acts and policies. ¹⁰⁴ As with permit applications, public notice is not required to be given where such notice would endanger human health or safety or harm or risk harming property or the environment. The minister is also excused from giving notice if the proposal is subject

^{104.} A policy is defined as a program, plan or objective, and includes guidelines or criteria to be used in making decisions about issuing, amending or revoking permits.

to a similar public participation process under other legislation or the decision is primarily administrative or financial in nature. Finally, no notice is required for proposals that form part of a budget or economic statement presented to the Legislative Assembly of Ontario.

After giving notice of a proposal, ministers are legally obliged to take every reasonable step to ensure that all relevant public comments are considered when decisions are made regarding the proposal. Ministers are required to give notice as soon as reasonably possible after a proposal for a policy or regulation has been implemented.

All ministries subject to the EBR, including the Ministry of Environment, have Statements of Environmental Values ("SEVs"). A SEV is intended to explain how a Ministry's values and goals, as well as those of the EBR, will be factored into ministry decisions that might significantly affect the environment. SEVs and any revisions thereof must be posted on the Environmental Registry.

Any two Ontario residents who believe that an existing regulation or policy should be amended, repealed or revoked in order to protect the environment may apply to the ECO (see Section 3.3, above) for a review. They can also propose new legislation or policies. Under certain conditions, a minister to whom such an application has been transmitted by the ECO is legally required to consider it in a preliminary manner to determine whether the public interest warrants a review. If so, a review must be conducted within a reasonable time. The minister must notify his or her decision to the ECO and the applicants, providing a brief statement of his or her reasons.

Access Policies

Access provisions under the EBR suffered a setback in November 1995, when a regulation was passed exempting the Ontario Ministry of Finance from the provisions of the EBR. In addition, public notice requirements for environmentally significant proposals that would result in the elimination, reduction or realignment of a provincial government expenditure were suspended for ten months. The ECO issued a Special Report strongly objecting to both of these moves. ¹⁰⁵ She argued that by removing the Ministry of Finance from the purview of the EBR, the government was weakening the EBR, since there are sometimes

Ontario, Ontario Regulation 482/95 and the Environmental Bill of Rights (Special Report to the Legislative Assembly of Ontario submitted by Eva Ligeti, Environmental Commissioner of Ontario, 17 January 1996).

major environmental issues associated with Ministry of Finance initiatives. She also argued that if the application of the EBR to proposals related to downsizing and consolidating government departments and services were temporarily suspended, environmental consequences could be overlooked for the sake of expediting cost-cutting. Finally, she objected to the fact that legislation amending the EBR was not posted on the EBR.

Ontario ministries routinely fail to comply with the EBR by not posting important legislative and policy proposals on the Registry.

It has been argued that the promise of the EBR has been undermined by the failure of government ministries to incorporate their SEVs into their business plans. 106

Ease of Access

The ECO has developed instruction kits and application forms for individuals wishing to apply for a review to determine whether an existing policy, act, regulation or instrument should be amended, repealed or revoked. The ECO also provides assistance to persons going through the review process.

Timeliness

The ECO issued a guidance document in 1996 listing factors that should be taken into consideration by government ministries in deciding how long to post proposals on the Registry in order to achieve the purpose of the EBR with respect to notice and comment. ¹⁰⁷ Use of the guidance has increased over time, but there are still instances of complex legislation being posted for only the thirty-day minimum period. As a result, there is little time for the public to respond and attempt to secure changes to the draft proposal before it is adopted.

107. Ontario, Implementing the Environmental Bill of Rights: Environmental Registry Notice and Comment Procedures-A Guidance Document, Environmental Commissioner of Ontario (August 1996); online: Environmental Commissioner of Ontario http://www.eco.on.ca/english/publicat/regnotic.pdf> (date accessed: 22 January 2002).

^{106.} See Conservation Council of Ontario, Missing Values: An Environmental Review of the 1999-2000 Ministry Business Plans by Chris Winter (February, 2000); online: Conservation Council of Ontario http://www.greenontario.org/cco/publications.html>. See also Ontario, Open Doors-Ontario's Environmental Bill of Rights, 1998 Annual Report of the Environmental Commissioner of Ontario to the Legislative Assembly of Ontario at 35; online: Environmental Commissioner of Ontario http://www.eco.on.ca/english/publicat/ar1998.pdf> (date accessed: 22 January 2002).

A recent example is the *Municipal Act, 2001* ("Bill 111"). It was posted on the Registry for only thirty days even though it is 350 pages long and contains sweeping changes to the rules on municipal governance in Ontario. 108

Affordability

See Section 3.3, above.

5. ENFORCEMENT AND COMPLIANCE ACTIONS

5.1 Introduction

Environmental legislation gives public authorities the power to enforce and ensure compliance with the requirements of environmental laws. Government policies attempt to structure the exercise of enforcement discretion so that the actions of enforcement officials are consistent across geographic regions and the regulated community feels that the enforcement process is predictable and fair. Enforcement is traditionally understood to include the exercise of all statutory powers ranging from inspection to conviction. Compliance-promotion is a preventive, communication- and education-based process in which government and industry share information and act cooperatively to identify and solve potential and ongoing compliance problems.

Enforcement and compliance-promotion activities generate valuable information about environmental risks and impacts of regulated activities, about compliance levels within regulated sectors, about the government's enforcement performance and about the success of different approaches to enforcement in ensuring compliance with environmental laws. This section contains an overview of rights to access enforcement and compliance-promotion information under the AIA (see Section 1.3.1, above), CEPA (see Section 1.3.2.3, above), CEAA (see Section 2, above), the habitat protection and pollution-prevention provisions of the *Fisheries Act*, as well as access to information legislation and government policy in the province of British Columbia.

^{108.} Bill 111 received third reading on 11 December 2001 and Royal Assent on 12 December 2001; it will come into force on 1 January 2003. Bill 111 was posted on the Environmental Registry on 2 November 2001 and comments were accepted from 2 November 2001 to 2 December 2001. Notice of the adoption of Bill 111 was posted on the Registry on 16 January 2002. The Environmental Registry posting for Bill 111, No. AF01E0002, contains further information about the public consultation process: Ontario Ministry of the Environment http://204.40.253.254/envregistry/016959 ea.htm> (date accessed: 22 January 2002).

5.2 Federal

Legal Right of Access to Information

The AIA gives the head of a government institution discretion to refuse to disclose any record that contains information obtained by an investigative body in the course of a lawful investigation pertaining to. inter alia, the enforcement of any law of Canada or a province. This discretion also extends to information "the disclosure of which could reasonably be expected to be injurious to the enforcement of any law of Canada or a province or the conduct of lawful investigations." "Investigative bodies" are listed in a regulation adopted under the AIA. Environment Canada and the Department of Fisheries and Oceans, the departments responsible for enforcing CEPA and the Fisheries Act, are not investigative bodies for the purposes of the AIA. Therefore, in order to refuse to disclose law enforcement records, these departments must in principle be able to establish that disclosure "could reasonably be expected to be injurious" to their law enforcement or investigation operations, unless the records are exempt from disclosure for some other reason recognized under the AIA, such as, for example, solicitor-client privilege or because they contain confidential third-party information.

CEPA contains provisions providing for disclosure of both general and case-specific enforcement information. At the general level, the federal Minister of Environment is required to report annually on the administration and enforcement of the Act. CEPA annual reports provide a national summary of enforcement and compliance efforts. The reports contain statistics on inspections, warnings, directions, prosecutions, and convictions under the various CEPA regulations. They also contain a brief description of enforcement and compliance initiatives. The CEPA Registry (see above, Section 3.2, regarding the Environmental Registry) contains copies of administrative agreements entered into by the Minister and provincial or territorial governments or an aboriginal people to streamline enforcement efforts under regulations, as well as equivalency agreements which render CEPA regulations inapplicable in a jurisdiction determined to have "equivalent" regulatory provisions in place.

CEPA also provides access to case-specific information. Thus, for example, it allows the public to be informed of deals struck to address situations of non-compliance by providing that the Environmental Registry must contain a copy of every "environmental protection alternative measures" agreement entered into by the Attorney General of Canada and a person who is alleged to have committed an offense under CEPA.

It also promotes public involvement in enforcement activities by giving every adult Canadian resident who believes that an offense has been committed under CEPA the right to apply to the Minister for an investigation. The Minister must then investigate all matters he or she considers necessary to determine the facts relating to the alleged offense. During the investigation, the Minister must report to the applicant every ninety days on the progress of the investigation and actions, if any, that the Minister proposes to take. If the investigation is discontinued, the Minister must provide reasons to the applicant.

If the Minister fails to conduct the requested investigation or responds to the investigation unreasonably, and if there has been significant harm to the environment, CEPA gives the applicant the right to file an "environmental protection action" against the alleged offender. 110 CEPA provides that notice of an environmental protection action must be given by the Minister on the Environmental Registry. In an environmental protection action, the court can order the alleged offender to do or refrain from doing something and can grant any other appropriate relief (including awarding costs), except awarding damages. It can also order the parties to such an action to give notice of matters relating to the action to the Minister, who must then post such notices on the Registry.

A court can stay or dismiss an environmental protection action if it is in the public interest to do so. In making this determination, the court can consider, *inter alia*, whether the Minister has an adequate plan to

110. In addition, if the person suffers or is about to suffer loss or damage as a result of conduct that contravenes CEPA or its regulations, that person can apply to a court for injunctive relief or an award of damages against the person engaging in such conduct. It remains to be seen how much evidence of the alleged offense the Minister will require before conducting an investigation or will be required by a court on an application for an environmental protection action.

The Québec Environment Quality Act, R.S.Q., c. Q-2 ("EQA") provides an example of a similar provision at the provincial level. Section 117 of the EQA allows a person claiming to have suffered damage to his or her health or property as a result of an emission of a contaminant to request that the Minister undertake an inquiry. If the Minister considers an inquiry to be warranted, he or she must report on the results of the inquiry to the complainant, the responsible person, and the local municipality (s. 118 of the EQA). When the Minister intends to exercise certain order powers to address an environmental situation under the EQA, he or she must give fifteen days prior notice (and an opportunity to comment) to the person to whom the order will be issued. A copy of the prior notice along with supporting information must be transmitted to the local municipality as well as to persons having registered complaints in connection with the matter. The EQA grants every person a right to a healthy environment and to its protection, subject to the provisions of the EQA (s. 19.1 of the EQA). A person domiciled in Québec who frequents a place or the immediate vicinity of a place in respect of which a contravention of this right is alleged can apply to the Superior Court for an injunction prohibiting any act or operation causing such contravention (ss. 19.2 and 19.3 of the EQA).

correct or mitigate the harm to the environment or human, animal or plant life or health or otherwise to address the issues raised in the action. Subject to the AIA, the Minister must post copies of all documents submitted to the court by the Minister in an environmental protection action on the Registry. Presumably, this includes a copy of any plan referred to above to correct or mitigate environmental harm.

CEPA further provides that where an offender has been convicted of an offense under the Act, the court can make an order directing the offender to publish the facts relating to the conviction in the manner directed by the court. If the offender fails to do so, the Minister can do so as provided in the order.

Under the *Fisheries Act*, the Department of Fisheries and Oceans must, as soon as possible after the end of each fiscal year, publish a report on the administration and enforcement of the fish habitat protection and pollution prevention provisions of the *Fisheries Act* for that year. These reports include statistics on warnings, charges laid, and convictions under the Act, broken down by region.¹¹¹

Given the very limited enforcement powers under CEAA¹¹² and the absence of offenses and penalties, compliance is secured primarily through education and information mechanisms such as the annual report and public registry system discussed in Section 2.2, above. The CESD (see above, Section 4.2) has been critical of the lack of quality of environmental assessments carried out under CEAA.¹¹³ In response, Environment Canada developed a Compliance Monitoring Framework guidance document. In addition, a compliance monitoring review was

^{111.} Fisheries and Oceans Canada, 1999-2000 Annual Report to Parliament on the Administration and Enforcement of the Fish Habitat Protection and Pollution Prevention Provisions of the Fisheries Act (Ottawa: Communications Directorate, Fisheries and Oceans Canada, 2000), online: Fisheries and Oceans Canada http://www.dfo-mpo.gc.ca/habitat/annrep99/english/index_e.htm (last modified 23 January 2002).

^{112.} In principle, an environmental assessment is carried out automatically if CEAA is triggered under s. 5 of the Act. However, the Minister is given discretion to order an environmental assessment in certain situations where s. 5 is not triggered but the Minister is of the opinion that the project could result in significant adverse interprovincial or international environmental effects or could cause significant adverse environmental effects on lands of federal interest. In such cases, the Minister can refer the project to a mediator or review panel and can prohibit the project proponent from doing anything that would commit the proponent to carrying out the project before the assessment is completed.

^{113.} Ottawa, 1998 Report of the Commissioner of the Environment and Sustainable Development, c. 6 "Environmental Assessment: A Critical Tool for Sustainable Development".

undertaken as a background study to the CEAA five-year review.¹¹⁴ According to the CESD, inconsistencies in departmental approaches to carrying out screenings continue despite these initiatives.¹¹⁵

Access Policies

In its Compliance and Enforcement Policy for the Canadian Environmental Protection Act, 1999, Environment Canada undertakes to post or give notice of the following information on the Environmental Registry: 116 copies of CEPA and its regulations; copies of environmental quality guidelines and objectives, release guidelines, and environmental codes of practice developed under the Act; copies of the CEPA Compliance and Enforcement Policy; a list of court actions arising from the enforcement of the Act; as well as information on precedent-setting cases under the Act. It also permits Environment Canada to use news media to publicize successful prosecutions under the Act. Environment Canada's website contains links to CEPA and Fisheries Act enforcement information. 117

A draft *Compliance and Enforcement Policy* for the Habitat Protection and Pollution Prevention Provisions of the *Fisheries Act* was recently released for public comment.¹¹⁸ It is based on the CEPA *Compliance and Enforcement Policy*.

Ease of Access

In 1998, the House of Commons Standing Committee on Environment and Sustainable Development issued a report on the enforcement

^{114.} Canada, Compliance Monitoring Review: Final Report by D. Redmond (Ottawa: Legislative and Regulatory Affairs, Canadian Environmental Assessment Agency, 28 June 1999), online: Canadian Environmental Assessment Agency http://www.ceaa.gc.ca/0007/0002/0002/bkstd02_e.htm (last modified 1st September 2001)

^{115.} Canada, 2000 Report of the Commissioner of the Environment and Sustainable Development, c. 9 "Follow-up of previous audits" and Exhibit 9.6, online: Office of the Auditor General of Canada and the Commissioner of the Environment and Sustainable Development http://www.oag-bvg.gc.ca/domino/reports.nsf/html/c009ce.html#0.2.2Z141Z1.2J976V.0H6VUF.P (date accessed: 23 February 2002).

^{116. (}March 2001), online: Environment Canada http://www.ec.gc.ca/enforce/homepage/cepa/CEPA99_final_eng.pdf. (last modified: 2 May 2001).

^{117.} Sections of the Environmental Law Enforcement website were still under construction in January 2002. Regional enforcement and compliance statistics for CEPA and the Fisheries Act had been temporarily removed from the Internet (as at 23 January 2002), but were available on CD-ROM on request.

Canada, Fisheries Act Habitat Protection and Pollution Prevention Provision Compliance and Enforcement Policy (Ottawa: Department of Fisheries and Oceans, July 2001).

of CEPA 1988 (see above, s. 1.3.2.3) and the habitat protection and pollution prevention provisions of the *Fisheries Act* in which it stated that CEPA 1988 and *Fisheries Act* annual enforcement reports did not provide enough information to the public.¹¹⁹ The report states that the CEPA 1988 annual reports provided fairly detailed information about prosecutions (parties, date, location and nature of violation), but only statistical information about warnings, directions, inspections and investigations. It noted that insufficient information existed regarding the recidivism rate for violators who had been issued a warning letter, the most frequently employed enforcement option. It remarked that enforcement data published in *Fisheries Act* annual reports was incomplete and noted that there were significant delays in publishing the reports.

The CEPA *Compliance and Enforcement Policy* provides that if a document is too long or contains complex maps or drawings, the CEPA Registry will only contain a notice of its availability and contact information.

The Pacific and Yukon Region of Environment Canada produces an annual *Compliance Status Summary Report* which provides a detailed overview of the compliance status of the industrial and commercial sectors with CEPA and the habitat protection and pollution-prevention provisions of the *Fisheries Act*. ¹²⁰ These reports contain information on compliance verification mechanisms used, compliance status, degree of implementation of a particular law or guideline, descriptions of enforcement actions that have been employed and compliance promotion activities performed. They also provide information on enforcement and compliance priorities for that year and present selected inspection data for given facilities, such as pulp and paper mills and mines.

Timeliness

CEPA and *Fisheries Act* administration and enforcement reports are published annually (although recent *Fisheries Act* reports have been published several years late) and contain statistical and summary information on enforcement. While such information is useful in identifying

^{119.} Canada, House of Commons, Enforcing Canada's Pollution Laws: The Public Interest Must Come First!, Third Report of the Standing Committee on Environment and Sustainable Development (Ottawa: Public Works and Government Services Canada, 1998) (Chair: Charles Caccia) para. 126-140, online: http://www.tbs-sct.gc.ca/rma/database/access/dflex.asp?id=39&lang=E (date accessed: 4 February 2002).

Online: Pacific and Yukon Region, Environment Canada http://www.pyr.ec.gc.ca (last modified: 12 July 2001); the reports are listed on the website as temporarily unavailable (as at 23 January 2002).

overall trends in compliance and enforcement, persons wishing to obtain short-term access to more detailed information must file access to information requests under the AIA (see Section 1.3.1, above).

Affordability

Print copies of the CEPA and *Fisheries Act* annual administration and enforcement reports are provided at no charge, and they can be accessed on the Internet for free. Other information relating to enforcement and compliance, if accessible, is subject to the payment of AIA fees.

5.3 Provincial (British Columbia)

Legal Right of Access to Information

FOIPPA (see above, Section 1.4.1) is the principal statute granting the public a legal right to access environmental enforcement and compliance information in British Columbia.

Access Policies

From 1994-2000, the British Columbia Ministry of Water, Land, and Air Protection published *Charges and Penalties Summary Reports*, which provided information on charges laid, convictions entered and penalties imposed for offenses committed under provincial environmental protection statutes and under the environmental protection provisions of the *Fisheries Act*.¹²¹

The other key British Columbia source of information on compliance and enforcement with environmental laws is a biannual government report formerly entitled the *Environmental Noncompliance Report*, recently suspended for a year and renamed the *Environmental Protection Noncompliance Report*. The report identifies industrial and municipal operations that are out of compliance with the *British Columbia Waste Management Act* and regulations. 123

^{121.} The publication of these reports is currently suspended. Online: British Columbia Ministry of Water, Land and Air Protection http://www.gov.bc.ca (date accessed: 23 January 2002).

^{122.} Online: British Columbia Ministry of Water, Land and Air Protection http://www.gov.bc.ca (date accessed: 23 January 2002).

^{123.} S.B.C. 1982, c. 41.

Ease of Access

The *Environmental Protection Noncompliance Report* is available on the Internet, as are past issues of the Charges and Penalties Summary Reports.

Timeliness

There was a one-and-a-half year delay in publishing the current *Environmental Protection Noncompliance Report*.

Affordability

The Ministry makes print copies of its reports available to the public at no charge. The reports are also available on the Internet. The cost of obtaining information through a FOIPPA request varies according to the format and volume of information requested.

6. NATIONAL POLLUTANT RELEASE INVENTORY

The National Pollutant Release Inventory ("NPRI"), established in 1992, is Canada's official pollutant release and transfer register, a national database of substances released into the environment from industrial and transportation sources or transferred off-site as waste. NPRI is administered by the federal Minister of the Environment under CEPA (see above, Section 1.3.2.3). Every year, the Minister publishes a notice in the Canada Gazette listing substances subject to NPRI reporting as well as criteria that trigger the reporting requirement, such as number of employees at a facility and threshold amounts of the substance released by a facility into the environment during the reporting year. The list of substances has been getting longer every year, partly to meet Canada's reporting requirements under international agreements, and reporting thresholds are being lowered for some substances in recognition of the fact that they can cause significant impacts even if released in small amounts. Facilities subject to NPRI must file their reports by June 1st of each year, and it is an offense under CEPA not to do so. In 1999, 2,190 facilities across Canada submitted 8,595 reports for 245 substances.124

^{124.} Canada, National Pollutant Release Inventory, *National Overview 1999* (Ottawa: Environment Canada, 2001), online: Environment Canada http://www.ec.gc.ca/pdb/npri/documents/Web_1999_NPRI_Overview.pdf> (last modified: 19 November 2001) [hereinafter "1999 National Overview"] at s. 3.2.

Legal Right of Access to Information

Under CEPA, the Minister must publish NPRI data but has discretion regarding how to do so. The right to access NPRI information is limited by confidentiality provisions discussed below.

A person required to provide information pursuant to an NPRI notice may submit a written request that the information be treated as confidential on the basis that it constitutes a trade secret, that disclosure would likely cause material financial loss or prejudice to the competitive position of the submitter, or that disclosure would likely interfere with contractual relations of that person. A request for confidentiality will be denied if the information is already in the public domain or can be accessed through other legal means such as obtaining a copy of a provincial waste permit by filing a request under access to information legislation. ¹²⁵

The Minister is entitled to determine whether the reasons supporting a request are well-founded. Even if they are, the request will be denied if disclosure of the information is in the interest of the protection of the environment, public health or public safety, and the public interest in disclosure outweighs in importance the material financial loss or prejudice to the competitive position of the applicant, as well as any damage to the privacy, reputation or human dignity of any individual that may result from disclosure.

If a confidentiality request is granted, the data will not be published, although it will still be gathered and entered into the database. The NPRI annual report lists the number of facilities granted confidential status and their overall contribution to the database. Six facilities were granted confidential status for information provided to the NPRI in 1999. 126

Ease of Access

NPRI information can be accessed on the NPRI website *via* the Environment Canada website. The search function on the website makes it possible to search by location (using postal codes), industrial sector, facility, or substance. Pictures of some facilities are provided, as well as

^{125.} Canada, National Pollutant Release Inventory, *Guide for Reporting to the National Pollutant Release Inventory, 2000* (Ottawa: Environment Canada, 2001), online: Depository Services Program, Government of Canada http://dsp-psd.pwgsc.gc.ca (date accessed: 23 January 2002).

^{126. 1999} National Overview, supra, note 139 at s. 31.

maps showing their location (this requires special software). Data and trend analysis over several years is provided in chart form, provided the searcher's browser supports the NPRI software. NPRI databases can also be downloaded, allowing users to analyze the data using the software of their choice. If the formats provided by NPRI do not meet a user's needs, alternate arrangements can be requested.

A CD-ROM containing a comprehensive collection of all the NPRI data and annual summary reports from 1994-1999 is available in dBase and Access formats. In the latter format, the data files include more than sixty specially developed queries designed to extract industry, facility and substance specific information. However, special software is required to run these queries. NPRI data is also available in a user-friendly format on a website managed by several Canadian environmental non-governmental organizations. ¹²⁷ The site offers data analysis and facilitates searching for information regarding specific geographic locations.

Timeliness

For the 1999 and 2000 reporting years, NPRI information has been made available to the public on the Internet within five months of the June 1st reporting deadline, with updates provided thereafter for late filings. For the 2000 reporting year, an annual report analyzing the information in relation to earlier reporting years is expected to be published in April 2002, as is a new CD-ROM containing all NPRI data from 1994-2000.

Affordability

Hard copies of NPRI reports as well as the NPRI CD-ROM are provided to members of the public at no charge.

7. EXCEPTIONS TO DISCLOSURE

Access-to-information laws give the public the right to access environmental and other information held by government. The right of access is limited by rules designed to protect the interest of government and third parties in maintaining the confidentiality of certain types of information.

^{127.} See http://www.pollutionwatch.org (date accessed: 25 January 2002).

This section reviews exceptions to the disclosure of information under Canadian access-to-information law.¹²⁸ It identifies the types of information to which the law "does not apply"¹²⁹ and reviews grounds that can be invoked by government for not disclosing information that *is* covered by the law. The focus is on the AIA (see above, Section 1.3.1); provincial access laws are referred to only for comparison purposes.

As discussed in Section 1 of this chapter, the Constitution does not create an explicit right to access government-held information and so far, to our knowledge, the courts have not found such a right to be implied in the Constitution. Therefore, the legally enforceable right to access information held by the federal government begins and ends with the AIA and other laws that may add to (but cannot subtract from) rights granted in the AIA. $^{130}\,$

Records to which the AIA applies but in respect of which the government can or must deny access are said to be "exempted" from the AIA. ¹³¹ Records to which the AIA "does not apply" ¹³² are said to be "excluded" from the AIA.

The key difference between exempted and excluded records lies in the right of an applicant to seek third-party review of the government's decision to deny an access request. With regard to exempted records, the Information Commissioner of Canada can review a decision by a federal government institution to classify a record as an exempted record and deny access on those grounds. In some cases, he even has authority to review the determination by a government institution that disclosure of a record would be injurious to the interests being protected by non-disclosure. In principle, the Information Commissioner has no such authority in respect of excluded records, since the AIA "does not apply" to them and the power of the Information Commissioner to obtain access

^{128.} Environmental laws also provide for access to information, but usually subject to the restrictions found in access-to-information laws. See e.g., s. 118.4 of the Quebec *Environment Quality Act*, R.S.Q., c. Q-2: "Every person has the right to obtain from the *Ministère de l'Environnement* copy of any available information concerning the quantity, quality or concentration of contaminants emitted, issued, discharged or deposited by a source of contamination or concerning the presence of a contaminant in the environment. This section applies subject to the restrictions to the right of access provided in section 28 of the *Act respecting Access to documents held by public bodies and the Protection of personal information* [R.S.Q., c. A-2.1]."

^{129.} Sections 68 and 69 of the AIA.

^{130.} Section 4(1) of the AIA states "[s]ubject to this Act, but notwithstanding any other Act of Parliament, every person ... has a right to and shall, on request, be given access to any record under the control of a government institution" [emphasis added].

^{131.} The AIA lists exclusions in ss. 68-69. It lists exemptions in ss. 13-26.

^{132.} Sections 68 and 69 of the AIA.

CANADA 67

to records in the course of his investigations is limited to examining "any record *to which this Act applies* that is under the control of a government institution" [emphasis added].

Often, government records do not fit clearly into one category or another. Thus, a record could be considered to fall either under the AIA exemption for information on operations of government (and could therefore be reviewed by the Information Commissioner) or under the exclusion for Cabinet confidences (and could therefore not be accessed by the Information Commissioner). This has led to disputes between the Information Commissioner and government institutions regarding whether the institution's decision not to disclose a document can be reviewed by the Information Commissioner. We will begin by discussing exemptions.

Exemptions are either discretionary or mandatory, meaning the government either can or must refuse to disclose the information. In some cases, in order to invoke a discretionary exemption, the government must have a reasonable expectation, reviewable by the Information Commissioner, that disclosure would be injurious to the interest being protected. No injury test applies to the exemptions for investigation records, techniques and plans of specified investigative bodies; information on government operations, including advice or recommendations developed by or for a government institution or minister of the Crown; information on testing or auditing procedures, or information subject to solicitor-client privilege. For these categories of exemptions, all the government need ensure before denying access is that the record in fact falls into one of these categories.

Under Section 20(1) of the AIA, the government must refuse to disclose any record that contains "third-party information" if it falls within one of the categories listed below:

- (a) trade secrets¹³³ of a third party;
- (b) financial, commercial, scientific or technical information that is confidential information supplied to a government institution by a

^{133. &}quot;Trade Secrets" is not defined in the AIA. The SOIA (see below, note 137) contains the following definition: "Any information, including a formula, pattern, compilation, program, method, technique, process, negotiation position or strategy or any information contained or embodied in a product, device or mechanism that (a) is or may be used in a trade or business; (b) is not generally known in that trade or business; (c) has economic value from not being generally known; and (d) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy" (s. 19(4) of the SOIA, enacted by s. 29 of the ATA).

third party and is treated consistently in a confidential manner by the third party;

- (c) information the disclosure of which could reasonably be expected to result in material financial loss or gain to, or could reasonably be expected to prejudice the competitive position of, a third party; or
- (d) information the disclosure of which could reasonably be expected to interfere with contractual or other negotiations of a third party.

Unlike other exemptions in the AIA, the exemption for third-party information is subject to a "public interest override" which allows the government to disclose the information if it would be in the public interest to do so. Before invoking this override to disclose records, however, the head of a government institution must find that the public interest in disclosure *clearly outweighs* in importance whatever injury disclosure would cause to the interests mentioned at (b), (c) and (d), above.

The AIA prescribes a procedure for notifying third parties that the head of a government institution intends to disclose third-party information pursuant to the Act and allowing them to object to disclosure. Subject to the government institution's discretion to extend the time limit, the notice is sent within thirty days of receipt of the access request, if the third party can reasonably be located. The third party then has twenty days to make representations in writing as to why the record ought not to be disclosed, following which the government institution has thirty days to make a decision about disclosure. If the decision is in favor of disclosure, the third party is notified and then has twenty days to file an appeal in Federal Court, which must hear the application in a summary way.

In his 2001 Annual Report, the Information Commissioner stated that "[t]his Commissioner has seen thousands of government-held records relating to private businesses. Real secrets are rare. Sounding the alarm of competitive disadvantage has become as reflexive in some quarters as blinking." ¹³⁴ He recommended abolishing the section 20(1)(b) exemption (confidential information) and questioned the need for section 20(1)(a) (trade secrets). In his view, the exemption found in section 20(1)(c) (financial loss or prejudice to the competitive position),

^{134.} Canada, 2000-2001 Annual Report of the Information Commissioner of Canada (Ottawa: Queen's Printer, 2001) [hereinafter "2001 Annual Report"], c. 3-Blueprint for Reform, B. Legislative Tune-Up, "Section 20-Confidential Business Information," online: Information Commissioner of Canada http://www.infocom.gc.ca/reports/2000-2001t-e.asp (last modified: 31 July 2001).

CANADA 69

reproduced above, is sufficient. He recommended broadening the public interest override to include such interests as consumer protection, and he suggested reviewing third-party notice requirements to allow other forms of notice, such as public notice or advertisement when this would be more effective, practical, and less costly.

In a consultation of government employees carried out as part of the current reform of the AIA (see above, Section 1.3.1), it was argued that twenty days is too little time for third parties to gather the evidence needed to prevent disclosure of their business information, especially when these parties are foreign entities. As a practical matter, it was argued that notice should not be required where it is known from past practice that the information will be disclosed regardless of the arguments of the third party.

The exemption for third-party information is the principal barrier to public access to government-held environmental information related to industry, its compliance with environmental law, and its impacts on the environment. 136 We now turn to a discussion of exclusions under the AIA.

The AIA does not apply to published material¹³⁷ or material available for purchase by the public. It stands to reason that if information is already in the public domain, the public does not need the AIA to gain access to it.¹³⁸ Material that is for sale, however, is not always publicly accessible, because price can be a barrier to access.¹³⁹ The Information

^{135.} Canada, Access to Information Review Task Force, Public Service Consultations, Consultation-Financial and Commercial Information (16 March 2001), online: Access to Information Review Task Force http://www.atirtf-geai.gc.ca/consultation2001-03-16b-e.html (date accessed: 18 January 2002).

^{136.} Environmental statutes sometimes contain specific provisions for the protection of confidential business information (see above, ss. 1.3.2.1, 1.3.2.3, 6).

^{137.} Even if the information has not been published, the AIA provides that the head of a government institution may refuse to disclose a record if he believes on reasonable grounds that the information will be published within ninety days or such further period as may be necessary for printing or translating.

^{138.} This principle is also applied elsewhere in the AIA. Thus, if a third party such as a foreign state or provincial government has already made the requested information public, the information may be disclosed, even though it would normally be exempt from disclosure. The same applies to personal information that is already publicly available.

^{139.} The tension between the public's need to know and the government's desire to recover costs or make a profit from the dissemination of information also exists under the AIA. The Information Commissioner has argued that regardless of the identity or purpose of an applicant requesting access to information, access fees should cover costs only and not yield a profit, and should be updated to account for the lower cost of disseminating information in new media formats. He also recommends amending the AIA to allow the government to deny frivolous

Commissioner has recommended narrowing the scope of this exclusion to cover only information that is reasonably priced and reasonably accessible to the public. 140

The second broad category of information to which the AIA does not apply is confidences of the Queen's Privy Council or "Cabinet confidences." Cabinet confidences are defined in the AIA as including such things as memoranda the purpose of which is to present proposals or recommendations to Council; discussion papers the purpose of which is to present background explanations, analyses of problems or policy options to Council for consideration by Council in making decisions; any documents recording deliberations of that kind, reflecting such communications or briefing ministers of the Crown on matters before Council; draft legislation; and any records containing information about the content of the types of documents listed above.

The exclusion of Cabinet confidences from the AIA has been justified in federal policy as follows:

The Canadian government is based on a Cabinet system. Thus, responsibility rests not in a single individual, but on a committee of ministers sitting in Cabinet. As a result, the collective decision-making process has traditionally been protected by the rule of confidentiality. This rule protects the principle of the collective responsibility of ministers by enabling them to support government decisions, whatever their personal views. The rule also enables ministers to engage in full and frank discussions necessary for effective functioning of a Cabinet system of government.¹⁴¹

There are two exceptions to this exclusion: Cabinet confidences must be made public once they have been in existence for at least twenty years, and discussion papers must be released if the decision to which they relate has been made public or four years have passed since the decision was made.

In principle, neither the Information Commissioner of Canada nor the Federal Court of Canada can review a decision by a minister of the Crown or the Clerk of the Privy Council to declare a record to be a Cabinet confidence and thereby deny access.¹⁴²

requests instead of using fees as a means of blocking such requests. 2001 Annual Report, c. III–Blueprint for Reform, B. Legislative Tune-Up, "Price Barriers."

^{140.} Ibi

Canada, "Confidences of the Queen's Privy Council for Canada" in Access to Information Act: Policies and Guidelines (Ottawa: Treasury Board Secretariat, 1993).

^{142.} See s. 39 of the *Canada Evidence Act*, R.S.C. 1985, c. C-5, which provides that a minister or the Clerk of the Privy Council can object to the disclosure of information

CANADA 71

The Information Commissioner has argued that Cabinet confidences should not be excluded from the AIA because the exclusion has the effect of undermining two objectives of the AIA: first, that necessary exceptions to the right of access should be limited and specific, and second, that decisions on the disclosure of government information should be reviewed independently of government. ¹⁴³ In support of his argument, the Information Commissioner has pointed out that the trend under provincial legislation and in other countries has been to make Cabinet confidences subject to a mandatory exemption under access legislation. He recommends that Canada follow this lead as part of the current reform of the AIA.

If Cabinet confidences were exempt from the AIA rather than excluded, the Information Commissioner would have the authority to review the content of disputed records and make his own findings

143. See 2001 Annual Report, c. III–Blueprint for Reform, A. Major Reforms, i) Reform of Cabinet Confidences. See also Canada, "The *Access to Information Act* and Cabinet confidences—A Discussion of New Approaches" (Study prepared by RPG Information Services Inc. for the Information Commissioner of Canada) (Ottawa: Minister of Public Works and Government Services, 1996), online: Information Commissioner of Canada http://www.infocom.gc.ca/publications/pdf_en/CABCONF.PDF> (last modified: 31 July 2001).

before a court, person or body with jurisdiction to compel the production of information (including the Information Commissioner) by issuing a certificate stating that the information constitutes a Cabinet confidence. With the recent coming into force of the Anti-Terrorism Act, S.C. 2001, c. 41 [hereinafter the "ATA"], the Canada Evidence Act has been amended to allow the Attorney General of Canada to issue a similar certificate to prohibit disclosure of information obtained in confidence from a foreign entity or for the purpose of protecting national defense or national security. There is a right of appeal from such a decision to the Federal Court of Appeal, which has the power to vary or cancel the certificate. There is no further right of appeal (s. 38.13(1) and s. 38.131 of the Canada Evidence Act, enacted by s. 43 of the ATA). The ATA amends the AIA to describe the effect of such a certificate: if it is issued before a complaint is filed with the Information Commissioner, the effect of the certificate is to exclude the information from the purview of the AIA. If it is issued when a complaint has already been filed, the Information Commissioner's investigation is discontinued and he must return the information to the head of the government institution that controls the information (s. 69.1 of the AIA, enacted by s. 87 of the ATA). The ATA also makes several amendments to the Official Secrets Act, R.S.C. 1985, c. O-5 (now called the Security of Information Act ("SOIA")). The Information Commissioner is now designated as a "person permanently bound to secrecy" in respect of "special operational information" (s. 8(1) and Schedule to the SOIA enacted by s. 29 of the ATA). He may only communicate or confirm such information if he can establish that it is in the public interest to do so in order to disclose an offense committed or about to be committed by someone acting in the service of Canada, and the public interest in disclosure outweighs the public interest in non-disclosure. In order to satisfy the second part of the test, he must have brought his concerns to the attention of a designated government official, unless he was acting to avoid grievous bodily harm or death (s. 15 of the SOIA enacted by s. 28 of the ATA).

regarding their status as Cabinet confidences. If he were not satisfied that a record qualifies as a Cabinet confidence, he could report on his findings to the head of the government institution and request a report on actions to be taken to implement his recommendations. If disclosure were not granted, he or the applicant could appeal to the Federal Court to order disclosure.

If Cabinet confidences were made subject to an exemption, the Information Commissioner does not recommend making the exemption subject to an injury test requiring the government to prove that disclosure could reasonably be expected to be injurious to the interests of Canada. He maintains that bringing such proof would unduly prejudice the government's interest in maintaining the confidentiality of these records. However, he recommends *defining* Cabinet confidences by reference to the essential interest being protected, rather than by focusing on types of documents. ¹⁴⁴ He also argues that Cabinet should be given the power to consent to disclosure of Cabinet confidences, ¹⁴⁵ and he urges the federal government to follow the lead of British Columbia, Alberta and Ontario by making any exemption for Cabinet confidences subject to a public interest override. ¹⁴⁶ Depending on the chosen wording, this could allow the head of a government institution to disclose a

^{144.} *Ibid.* He recommends using the following test: would disclosure "reveal the substance of deliberations of Cabinet or one of its committees?"

^{145.} Mandatory exemptions under the AIA always provide that records can be disclosed with the consent of the party whose interests are being protected. See s. 13(2)(a) for other governments or international organizations, s. 19(2)(a) for personal information, and s. 20(5) for third-party information. Note that the exemption for personal information refers to the definition of personal information found in the *Privacy Act*, R.S.C. 1985, c. P-21. Sections 18 *et seq.* of that act list a set of exemptions similar to those in the AIA, and s. 70 excludes Cabinet confidences from the application of the *Privacy Act*.

For British Columbia, see above, Section 1.4.1. See also Alberta Freedom of Information and Protection of Privacy Act, R.S.A. 2000, c. F-25, s. 32(1) "Whether or not a request for access is made, the head of a public body must, without delay, disclose to the public, to an affected group of people, to any person or to an applicant (a) information about a risk of significant harm to the environment or to the health or safety of the public, of the affected group of people, of the person or of the applicant, or (b) information the disclosure of which is, for any other reason, clearly in the public interest. (2) Subsection (1) applies despite any other provision of this Act." See also Ontario Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. F.31, s. 23: "An exemption from disclosure of a record under sections 13, 15, 17, 18, 20, 21 and 21.1 does not apply where a compelling public interest in the disclosure of the record clearly outweighs the purpose of the exemption." This override applies to advice to government but not Cabinet records. The latter are covered by a more general override: "11. (1) Despite any other provision of this Act, a head shall, as soon as practicable, disclose any record to the public or persons affected if the head has reasonable and probable grounds to believe that it is in the public interest to do so and that the record reveals a grave environmental, health or safety hazard to the pub-

CANADA 73

Cabinet confidence in the face of grave or significant risk to the environment or human health, or if it were clearly in the public interest to do so. The exclusion for Cabinet confidences is the principal barrier to public access to government-held environmental information.

For those seeking access to government-held environmental information, the exclusions and exemptions stipulated in the AIA can and do significantly limit the amount and type of information to which they have access. The public's interest in disclosure is offset by political, economic and privacy interests that are protected by non-disclosure. Every year, considerable financial and human resources are required to balance these competing interests in the context of the administration of the AIA. 147

^{147. 2001} Annual Report, c. 1–Restoring the Foundations of Accountability, "Why do these problems persist?"

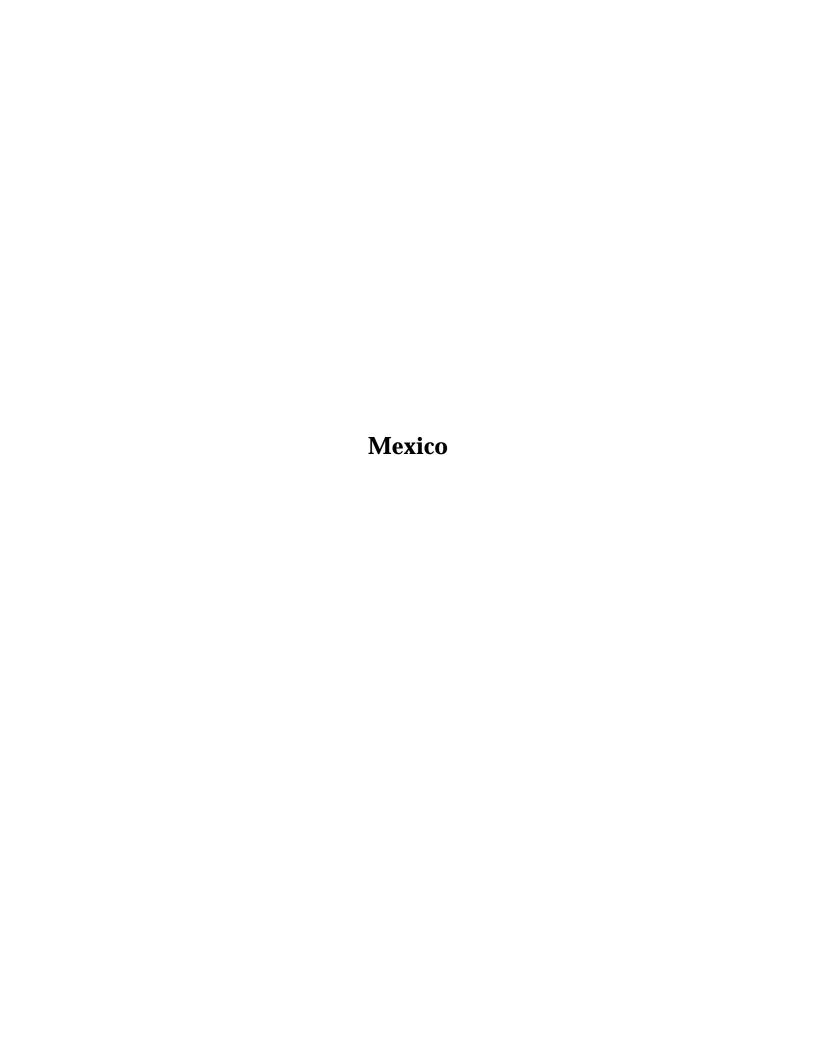


Table of Contents

LIS	T OF	ACRONYMS AND ABBREVIATIONS
BA	CKG	ROUND83
1.	CON	NSTITUTIONAL AND LEGAL FRAMEWORK 83
	1.1	Federal constitutional framework 83
	1.2	State constitutional framework
	1.3	Federal Law of Administrative Procedure 87
	1.4	Federal Law of Transparency and Access to Public Governmental Information
	1.5	General Law of Ecological Balance and Environmental Protection
	1.6	Environmental Law of the Federal District 103
2.	ENV	/IRONMENTAL IMPACT ASSESSMENT 103
	2.1	Federal law
	2.2	State law
3.	PER	MITS AND AUTHORIZATIONS
4	PI.A	N AND PROGRAM PROPOSALS 113

5.	. LAWS, REGULATIONS AND STANDARDS			
	5.1	Laws	118	
	5.2	Regulations	118	
	5.3	Standards	119	
6.	CON	MPLIANCE ACTIONS AND LAW ENFORCEMENT	122	
7.	POL	LUTANT RELEASE AND TRANSFER REGISTRIES	124	
8.		CEPTIONS TO THE RIGHT TO ACCESS TO VIRONMENTAL INFORMATION	128	
9	GEN	NERAL CONSIDERATIONS	132	

List of Acronyms and Abbreviations

BIE Economic Information Bank (Banco de Información

Económica)

CCDS Sustainable Development Advisory Boards (Consejos

Consultivos para el Desarrollo Sustentable)

CCNNPA National Advisory Committee for Environmental

Protection Standards (Comité Consultivo Nacional de

Normalización para la Protección al Ambiente)

CDIA INE Environmental Documentation and Information

Center (Centro de Documentación e Información

Ambiental)

Cenai Remexmar National Information Center (Centro

Nacional de Información)

CNA National Water Commission (Comisión Nacional del

Agua)

Constitution Political Constitution of the United Mexican States

DOF Official Gazette of the Federation (Diario Oficial de

la Federación)

EIA Environmental impact assessment

ICNA Environmental Rules Compliance Index (Índices

de Cumplimiento de la Normatividad Ambiental)

Imeca Air Quality Metropolitan Index (Índice Metropolitano

de la Calidad del Aire)

INE National Institute of Ecology (Instituto Nacional de

Ecología)

INEGI National Institute of Statistics, Geography and

Information (Instituto Nacional de Estadística,

Geografía e Informática)

LAN Law of National Waters (Ley de Aguas Nacionales)

LFPA Federal Law of Administrative Procedure (Ley Federal

de Procedimiento Administrativo)

LGEEPA General Law of Ecological Balance and Environ-

mental Protection (Ley General del Equilibrio Ecológico

y la Protección al Ambiente)

LGVS General Wildlife Law (Ley General de Vida Silvestre)

EIS Environmental impact statement

NMX Mexican Standards (Normas Mexicanas)

NOM Mexican Official Standard (Norma Oficial Mexicana)

NTC Coordinating Technical Nuclei (Núcleos Técnicos

Coordinadores)

PMMIRIP Program for the Minimization and Comprehensive

Handling of Hazardous Industrial Hazardous Waste in Mexico (*Programa para la Minimización y el Manejo Integral de los Residuos Industriales Peligrosos en México*)

Profepa Office of the Federal Attorney General for

Environmental Protection (Procuraduría Federal de

Protección al Ambiente)

PRTR Pollutant release and transfer register

Rama Automatic Atmospheric Monitoring Network

(Red Automática de Monitoreo Atmosférico)

Remexmar Mexican Network for Environmental Handling of

Hazardous Waste (Red Mexicana de Manejo Ambiental

de Residuos Peligrosos)

Remib Mexican Biodiversity Information Network

(Red Mexicana de Información sobre Biodiversidad)

RFTS Federal Registry of Procedures and Services

(Registro Federal de Trámites y Servicios)

Semarnat Secretariat of Environment and Natural Resources

(Secretaría de Medio Ambiente y Recursos Naturales)

Sidia Environmental Indicators System (Sistema de

Indicadores Ambientales)

Sima Air Monitoring System for the Mexico City

Metropolitan Area (Sistema de Monitoreo Atmosférico

de la Zona Metropolitana de la Ciudad de México)

Sinia	National Environmental and Natural Resources Information System (Sistema Nacional de Información Ambiental y de Recursos Naturales)
Sirrep	Hazardous Waste Tracking System (Sistema de Rastreo de Residuos Peligrosos)
SNIB	National Biodiversity Information System (Sistema Nacional de Información sobre Biodiversidad)
Siore	Geographical Information System for Ecological Control (Sistema de Información Geográfica para el Ordenamiento Ecológico)
SMAZMVM	Air Monitoring System for the Valley of Mexico Metropolitan Area (Sistema de Monitoreo Atmosférico de la Zona Metropolitana del Valle de México)

BACKGROUND

The purpose of this chapter is to review the constitutional framework and the provisions of federal law (and selected state provisions) governing public participation and access to environmental information in Mexico, as well as mechanisms to make such rights effective.

Mexico is developing initiatives to give effect to these rights and to comply with obligations it has assumed under international treaties such as the North American Agreement on Environmental Cooperation¹ and the United Nations Conference on the Environment and Development.²

1. CONSTITUTIONAL AND LEGAL FRAMEWORK

In this section, we will review the constitutional and legal provisions governing access to public information, in general as well as specifically with regard to the environment.

1.1 Federal constitutional framework

The right to information was included in the Political Constitution of the United Mexican States (the "Constitution") in 1977.³ Article 6 of the Constitution provides: "The expression of ideas shall not be subject

^{1.} The NAAEC promotes transparency and citizen participation in the development of environmental laws and policies, and calls on authorities to publish and make publicly available periodic reports on the state of the environment.

^{2.} Through the Río Declaration, the UNCED promotes access to information, participation and fairness in environmental decision-making. Principle 10 of the Río Declaration, approved at the United Nations Conference on the Environment and Development (Río de Janeiro, 3-14 June 1992), provides: "At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available."

pation by making information widely available."

3. The Constitutional amendment was published in the Official Gazette of the Federation (*Diario Oficial de la Federación*–DOF) on 6 December 1977.

to any judicial or administrative inquiry, except in the case of an attack on morality, the rights of third parties, the commission of a crime, or disturbance of public order; the right to information shall be guaranteed by the State."

The legal scope of this right has been a matter of debate because the constitutional provision "does not specify how 'right to information' should be understood, nor who the rights-holder is, nor the legal means by which the State is to enforce it." Rules to implement the constitutional reform were required the development of a specific regulatory statute.

In interpreting the legal scope of the right to information, the Supreme Court of Justice at first issued a very restrictive criterion, which established:⁵

That the right to information is a social guarantee, correlative to the freedom of expression implemented as part of the so-called "Political Reform," and consisting of the State allowing the regular expression of the diversity of opinions of political parties in the various communications media;

That the precise definition of the right to information is left to secondary legislation;

That there was no intention of establishing an individual guarantee allowing any citizen, when he deems it convenient, to request and obtain certain information from State bodies.

The full bench of the Supreme Court later broadened the scope of the aforementioned guarantee, establishing that "the right to information, closely linked with the right to know the truth, requires that the authorities refrain from communicating manipulated, incomplete or false information, under penalty of committing a serious violation of individual guarantees pursuant to Constitutional Article 97."⁶

A more recent Supreme Court criterion broadens "the understanding of this right, seeing it as an individual guarantee, logically limited by

Report of the Joint Commission on Legislative Studies and Constitutional Matters, reviewing the draft reform submitted by the President of the Republic in October 1977. Federal Elections Commission, *Reforma Política*, Mexico, Volume I, 1978, p. 46.

Instance: Second Chamber; source: Federal Judicial Weekly (Semanario Judicial de la Federación); part: X-August; thesis: 2a. I/92; p. 44.

^{6.} Federal Judicial Weekly and Gazette, ninth period, volume III, June 1996, p. 513.

national interests and those of society, as well as by respect for the rights of third parties." $^{7}\,$

In practice, the matter has evolved. At first, the "right to information" was not understood as a right to access information. Rather, it was considered to be a mechanism for the State to "guarantee" the public the availability of timely, truthful and reliable information. Another school of thought later arose, which considered that the government had an obligation correlative to the individual guarantee of information. The result was that initially the guarantee of access to information had no regulation to give it effect.

In ordinary legislation, it was in 1994 that the Federal Law of Administrative Procedure (*Ley Federal de Procedimiento Administrativo*–LFPA) defined the exercise of the right to public information. Later, in 1996, the scope of the right to environmental information was specified in the reforms to the General Law of Ecological Balance and Environmental Protection (*Ley General del Equilibrio Ecológico y la Protección al Ambiente*–LGEPA), approved by Congress. These reforms provide for public access to files, documents and data kept by the administrative authority. Both of these laws are discussed below.

The second constitutional provision relating to this topic is Article 8, referring to the so-called right of petition, an individual guarantee closely related to the right to access information. This article provides:

Public officials and employees shall respect the exercise of the right of petition, provided that it is made in writing, in a peaceful and respectful manner; but in political matters, only citizens of the Republic may make use of this right. 8

Every petition must receive a written response from the authority to which it is directed, which is bound to issue it promptly to the petitioner.

The right of petition consists of the right of an individual to approach State authorities and file a written request or petition of any nature, in order to obtain a response thereto. The right of petition is a full individual guarantee consisting of rights for private individuals and a correlative obligation to the authorities. The authorities' obligation is to respond in writing to the request received. However, this does not necessarily imply that they must respond affirmatively to the petition.

Ninth period. Instance: Full Court; source: Federal Judicial Weekly and Gazette, volume XI, April 2000, thesis: P. LX/2000, page: 74, re isolated constitution theses.

^{8.} Constitutional Article 34, paragraph V, also considers a citizen's prerogative to "[e]xercise the right of petition in all kinds of business."

A very important aspect of this constitutional guarantee is that the exercise thereof is not subject to the fulfillment of any conditions, *i.e.*, it is a full guarantee granted to all persons. The Supreme Court has clearly defined that "Constitutional Article 8 does not subject the response, nor any other aspect of the right of petition, to the petitioners' compliance or noncompliance with any regulatory requirements."

It should be noted that under the constitutional reforms of 28 June 1999, Constitutional Article 4 was amended to include the right of all persons "to an environment adequate for their development and well-being." This article reinforces the need for the State to promote mechanisms necessary to ensure the development and well-being of the citizenry in an adequate environment, including mechanisms for access to environmental information.

1.2 State constitutional framework

The right to information and the right of petition are included in the legal framework of the Mexican states, based on the principle of federal constitutional supremacy. 11 The States' constitutions may not contradict or restrict the prescriptions of the federal Constitution. That is to say, a state may broaden the protection of a right within its own Constitution, but in no case may it restrict protections afforded by the federal Constitution.

As an example, the Political Constitution of the State of Yucatán states in Article 86:

The state, in its function of organizing life in society, shall take measures required to ensure the solidarity of associated elements and to guarantee that they shall share equitably in the benefits of social living. The state, using its public powers, shall guarantee respect for every individual's

^{9.} Right of petition, Federal Judicial Weekly, sixth period, vol. LXXVII, third part, p. 25, Injunction review 6176/63, José Guadalupe Arontes Blancas, 28 November 1963, 5 votes: "It is not accurate to say that the right of petition, contained in Constitutional Article 8, is subject to the petitioner's proof of legal interest in the object of his petition, as the guarantee under said provision only requires that it be exercised in writing, in a peaceful and respectful manner."

Right of petition, Federal Judicial Weekly, sixth period, vol. XIX, third part, p. 63, Injunction review 4916/58, Juan N. Canales, 19 January 1959, unanimity of four votes.

^{11.} Constitutional Article 133 expresses this principle. Under a recent Supreme Court decision, international treaties are considered to be hierarchically superior to local laws. However, as regards federal laws, in certain matters the Constitution provides that Congress, through a federal law, may distribute competencies among the federal, state and municipal governments.

right to enjoy an ecologically balanced environment and the protection of the ecosystems that represent Yucatán's natural resources, based on the following principles:

I. Residents of the state have the right to live in a healthy environment that allows them to have a worthy life and to rationally use the natural resources of the state to attain sustainable development, as provided by Law;

II. No person may be required to carry on activities that cause or may cause environmental deterioration, as provided by Law; and

III. Residents of the state have the right to know and have access to current information on the state of the environment and natural resources of the state, as well as to participate in activities for the conservation and improvement thereof. 12

These constitutional provisions are regulated by the Environmental Protection Law of the State of Yucatán, which provides, in the chapter on citizen participation and environmental awareness:

It is the obligation of the State Secretariat of the Environment to publicize, in the various mass media and in any other publication, legal provisions of general interest and the programs and projects relating to ecological balance and environmental protection.

This law clearly establishes that any person shall be entitled to require the Secretariat and local governments to provide any environmental information requested in a written petition, specifying the requested information and the reasons for the petition. The Secretariat may deny information deemed confidential and documents held by the Secretariat that have been issued by a different authority. 14

1.3 Federal Law of Administrative Procedure

The LFPA was published in the Official Gazette of the Federation (*Diario Oficial de la Federación*–DOF) on 4 August 1994, and entered into force on 1 June 1995. The provisions of the law apply to the acts, proceedings and rulings of the centralized federal public administration and of the decentralized agencies of the parastate federal public administration as regards their official acts, services provided exclusively by the State,

^{12.} This article is found in Title Eight of the Yucatán State Constitution, referring to the "State's function for living and integral development."

^{13.} Article 98 of the Environmental Protection Law of the State of Yucatán.

^{14.} Article 99 of the Environmental Protection Law of the State of Yucatán.

and private contracts entered into with the State, subject to the provisions of international treaties signed by Mexico. The LFPA supplements various administrative laws, such as the LGEEPA. 15

As regards access to information, the LFPA sets out with the following basic principles:

All administrative acts of a general nature, such as "regulations, decrees, accords, Mexican Official Standards, circulars and forms, as well as guidelines, criteria, methodologies, instructions, directives, rules, manuals," and any other provisions "issued by the decentralized entities and agencies of the federal public administration," must be published in the DOF to have legal effect.¹⁶

In its dealings with private individuals, the public administration is required to inform them of those proceedings in which they have a legal interest and to provide them with copies of the information contained therein, ¹⁷ as well as information on the legal and technical requirements considered for certain projects, acts or requests that are proposed. ¹⁸ Lastly, the authorities must allow access to their records and files as provided in this or other laws. ¹⁹

The time for the agency to resolve any matter may not exceed three months.

The Law includes a very common provision in Mexican law, the so-called *deemed denial*: if the applicable period passes, the request must be deemed to have been ruled on in the negative, the only exception being where another legal or administrative general provision provides to the contrary. ²⁰ This represents an obstacle to access to information, as the authority will not infrequently let the period run out, meaning the matter is automatically deemed denied, with no grounds or reasons whatsoever.

The interested parties in an administrative procedure have the right to know, at any time, the status of their proceeding by obtaining timely information from the corresponding offices. Exceptions to this

^{15.} The LFPA does not apply to the fields of taxation, finance, public servants' liabilities, elections, economic competition, agrarian law, labor or criminal prosecutions (Article 1, second paragraph).

^{16.} LFPA Article 4.

^{17.} LFPA Article 16, paragraph III.

^{18.} LFPA Article 16, paragraph VII.

^{19.} LFPA Article 16, paragraphs VII and VIII.

^{20.} LFPA Article 17.

rule include the case of information regarding national defense and security, commercial or industrial secrets, where the petitioner is not a party to or affected by the proceeding, or when a legal provision prohibits disclosure. At their own cost, interested parties may request certified copies of the documents contained in the administrative file they wish to view. 21

The LFPA provides for the creation of the Federal Registry of Procedures and Services (*Registro Federal de Trámites y Servicios*–RFTS),²² a public registry kept by the Federal Regulatory Improvement Commission (*Comisión Federal de Mejora Regulatoria*) intended to collect information on the procedures undertaken by the agencies and decentralized entities of the federal public administration. This registry records all matters involving administrative procedures and the operating characteristics thereof.²³

1.4 Federal Law of Transparency and Access to Public Governmental Information

The Federal Law of Transparency and Access to Public Governmental Information (Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental) entered into force on 12 June 2002. It is a law of public order intended to ensure that all persons have access to information held by Mexican federal authorities. The Law establishes the obligation for federal entities to make publicly available, and update, certain categories of information; provides a process for attending to access to information requests; and it contains provisions to protect personal data. The transitional provisions stipulate that the federal executive branch will issue a regulation to implement the Law within one year from its entry into force (the "Regulation"). Once the Regulation comes into force, the public may begin to file access to information requests. Government agencies have until 1st January 2005, to organize their files in accordance with criteria to be issued by the General National Archive, publish a simple guide to their classification and cataloging systems, and organize their files. Compliance with the Law is mandatory for federal public servants, and their interpretation of the Law must advance the principle of the publicity of information. The Law lists actions of public servants, such as the destruction or hiding of information and the disclosure of confidential or reserved information, that give rise to liability under the Federal Law of Administrative Responsibilities of Public

^{21.} LFPA Articles 33 and 34.

^{22.} LFPA Articles 69-E, paragraph III, and 69-M through 69-Q.

^{23.} See http://www.cofemer.gob.mx/cofemer60/frmregistro.htm (updated 18 December 2001).

Servants (Ley Federal de Responsabilidades Administrativas de los Servidores P'ublicos). These liabilities are independent of any applicable civil or criminal liability.

"Legal subjects" (or entities) covered by the Law include, without limitation, the executive, legislative and judicial branches of government, as well as autonomous constitutional bodies and federal administrative courts. The Law establishes that all legal subjects must prepare public annual reports on activities undertaken to ensure access to information.

The Law provides that all governmental information referenced therein is public. "Information" is that contained in documents generated, obtained, acquired, processed or kept by legal subjects for whatever reason. "Documents" are defined very broadly to include any record documenting the exercise of the powers or activities of legal subjects and public servants, regardless of its source or date of creation. These records may be on any medium, whether printed, audio, visual, electronic or holographic.

The Law defines reserved and confidential information, which includes information so defined in any other law (see Section 8 below).

The Law establishes transparency obligations of the legal subjects and lists in detail the classes of information that must be made available to the public, including that relating to the organizational structure, the powers of each administrative unit, a directory of public servants, services offered, allocated budget, audit results, permits issued, applicable regulatory framework, contracts entered into and any other information frequently requested by the public, as well as the electronic address for filing information requests. Legal subjects must provide computers for interested persons to access information directly or with a printout. They must also provide any assistance users may require. The Law provides for the creation of "liaison units" and "information committees" in each agency to undertake the procedures set forth in the Law. It provides that these units and committees must be created using existing human, material and budgetary resources, as they will not involve additional appropriations.

Federal courts must publish their judgments, giving the parties the opportunity to oppose the publication of their personal data. The Law also requires pre-publication of draft legislation and administrative provisions, except when doing so would compromise achieving the purpose of the provision or in emergency situations. Information on

transfers of public funds to political parties and persons must also be made public.

The Law establishes the legal framework applicable to access to information requests. Requests must be made in writing or in any other form approved by the Institute (see below), and contain the name and domicile (or other means of receiving notices) of the person filing the request, a clear and precise description of the requested documents and any other information that may facilitate the search, and the preferred means of access to information. The liaison unit that receives the request may ask for additional information or the correction of errors, within 10 business days following the filing of the request. It must also assist private individuals in preparing requests, especially those who cannot read or write, and direct such person to the relevant entity or agency when the information requested does not fall under its jurisdiction. In no case may the delivery of the information be conditioned on how it will be used, nor may the requestor be required to prove his or her interest in connection with the information. Entities and agencies are required only to deliver documents actually found in their files. If the information is already publicly available in printed media, the requester must be informed of the source, place and form in which such information may be consulted, reproduced or acquired.

The liaison unit must notify the requester of the cost and format of the information as soon as possible, in no case more than 20 business days after the request is received. This period may be extended by another 20 days if the requester is notified of the reasons for the delay. Legal subjects must endeavor to reduce the costs of information delivery, which may not exceed the sum of the cost of reproduction and the cost of shipping. Access must be granted within a period of 10 business days of such notification, provided that the requester pays the specified fees. The Regulation will establish the manner and terms for the internal processing of access to information requests, including a procedure to correct any noncompliance by the entities and agencies in providing access to the information.

The Law provides for the establishment of an information committee in each entity, whose functions will include reviewing documents classified as reserved or confidential that are subject to an access request, in order to confirm, modify or revoke the designation and grant or deny access. Denials must provide justifications and notify the requester that an appeal may be filed with the Institute. Notice of the committee's decision must be given within the aforementioned periods.

Failure to respond to an access request within the stated period is deemed an acceptance of the request, in which case the entity is required to supply the information within a period not to exceed 10 business days and cover the costs associated with the reproduction of the materials. The liaison units are not required to process offensive requests, to deliver substantially identical information in response to the same person's request, or to provide information that is already publicly available.

When an information committee denies access to information, or when it gives notice that the requested documents do not exist, the requester may file an application for review with the Institute within 15 business days following the date of notification. The application may also be filed when the entity or agency does not disclose requested personal data or refuses to modify or correct them; when the requester disputes the timing, cost or format of disclosure; when the requester considers the information provided to be incomplete; or when the information provided does not correspond to that requested.

The Institute is an agency under the federal public administration that has autonomous operations, budget, and decision-making authority. It is responsible for the promotion and awareness of the right to access information, for ruling on access to information denials, and for protecting personal data held by the agencies and entities. Its five commissioners are named by the federal executive branch and serve nonreappointable seven-year terms. The Senate may veto nominations by majority vote. The Law requires that the Institute report to Congress annually, based on data submitted by the agencies and legal entities, on the number of requests filed and the results thereof; response time; number and results of matters handled by the Institute; any complaints filed with the internal control bodies; and any difficulties observed in compliance with the Law.

The Institute must correct errors in applications for review filed by private individuals. The chairing commissioner of the Institute must review the file and present a draft ruling to the full Institute within 30 days after the application is filed. During the proceedings, the applicant is assisted by the Institute, if necessary. The Institute must allow the parties to present, verbally or in writing, any arguments supporting and justifying their positions, as well as to advance their allegations. The full Institute must issue a final ruling within 20 business days following the submission of the draft ruling. Either of these periods may be extended by another of equal duration, providing reasons. In its ruling, the Institute may dismiss or stay the proceedings, or confirm, revoke or modify

the committee's decisions. The rulings, which must be issued in writing, may order that access be granted and establish compliance deadlines and procedures to ensure the execution thereof. If the Institute does not issue a ruling in the set period, the decision under appeal is deemed to be confirmed. One year after the issuance of a notice of access denial, the affected private individual may request that the Institute reconsider the ruling, which it must do within a maximum period of 60 business days.

The Institute's rulings are binding on legal entities and agencies, but private individuals may contest them in court. The courts will have access to reserved and confidential information when it is indispensable for ruling on the matter and would have been admissible at trial.

1.5 General Law of Ecological Balance and Environmental Protection

Prior to 1996, the LGEEPA provided certain instruments for the disclosure of information on environmental management by the Secretariat of Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*–Semarnat, as it is now called). The General Situation of Ecological Balance and Environmental Protection²⁴ and Semarnat's Ecological Gazette (*Gaceta Ecológica*) are instruments containing information on legal provisions, Mexican Official Standards (*Normas Oficiales Mexicanas*–NOMs), decrees, regulations and other administrative acts, treaties, international environmental documents and environmental information of general interest published by the federal and local governments, independent of the publication thereof in the DOF. The Ecological Gazette also publishes official information on protected nature areas and the preservation and sustainable use of natural resources.²⁵

The LGEEPA was reformed by the federal executive branch in 1996 to include, among other things, the right to environmental information,

Environmental Statistics (Estadísticas del Medio Ambiente), Mexico, 1994, INEGI-Semarnat.

^{25.} LGEEPA Article 159 bis 2. The Ecological Gazette has the legal nature of a government gazette pursuant to the Law of the Official Gazette of the Federation and Government Gazettes (*Ley del Diario Oficial de la Federación y Gacetas Gubernamentales*), published on 24 December 1986. However, the purpose, contents and scope of the Ecological Gazette are broader than those of other government gazettes, as they solely focus on the "publication of accords, orders, rulings, circulars, notifications, notices, and in general all communications issued by the agencies of the federal executive branch, the publication of which is not to be made in the Official Gazette of the Federation" (Art. 13).

as a mechanism to broaden citizen participation in environmental management. $^{26}\,$

In accordance with this draft reform:

we work on the basis that objectively informed communities will make the decisions that best protect their interests and rights, while being aware of what happens in their surroundings. Given the prevailing environmental conditions in some regions and zones in the country, communities in particular and society in general must be aware of what is happening and not happening in environmental matters. Therefore, we must guarantee that the responsible authority keeps such information available to the public.

The LGEEPA clearly specifies federal, state and municipal jurisdiction related to the policy on environmental information and awareness.²⁷ It deals with access to information in two ways: the release of environmental information as an obligation of the State, and the personal right to access information held by the administrative authority as a subjective right of any person.

Release of environmental information

The LGEEPA requires that environmental authorities–namely Semarnat, the decentralized agencies thereof, ²⁸ and the states, municipalities and Federal District²⁹–make public any official information they hold. It contemplates the creation of a National Environmental and Natural Resources Information System (*Sistema Nacional de Información Ambiental y de Recursos Naturales*–Sinia) to register, organize, update and release national environmental information. Sinia is coordinated and complemented by the National Accounts System under the National Institute of Statistics, Geography and Information (*Instituto Nacional de Estadística, Geografía e Informática*–INEGI).

The LGEEPA provides for Sinia's integration of information on inventories of natural resources in the national territory, mechanisms for

^{26.} The reform was published in the DOF on 13 December 1996.

^{27.} Articles 5, 7, 8 and the recently reformed 159 bis of the LGEEPA; published in the DOF on 13 December 2001.

^{28.} The Semarnat Internal Regulations, published in the DOF on 4 June 2001, consider the following to be decentralized agencies of Semarnat: the National Water Commission, the Mexican Water Technology Institute, the National Institute of Ecology, the Office of the Federal Attorney General for Environmental Protection, and the National Commission for Protected Natural Areas.

With the LGEEPA reform of 31 December 2001, not only the Secretariat but also the states, municipalities and the Federal District have the obligation of participating in Sinia.

and results of air, water and soil quality monitoring, ecological enforcement, and information on the registers, programs and actions intended to preserve ecological balance and environmental protection. As such, Sinia is intended to incorporate relevant reports and documents arising from scientific, academic, technical and other activities involving the environment and the preservation of natural resources in Mexico by national or foreign individuals or entities.

Until now, only isolated systems have been developed for the analysis, formulation, execution and assessment of environmental policies. They operate independently, generally without any means to ensure compatibility and integration, which would enable the effective sharing, processing, analysis, transfer and release of information. Internet access to these systems is available, although they are not listed as systems related to Sinia.

The following information systems developed by the federal public administration are directly related to the Sinia network:

Environmental Indicators System (Sistema de Indicadores Ambientales-Sidia). This system provides elements supporting the daily environmental work of public servants and the general public, making available environmental and natural resource information organized by date, location and topic. It uses simple indicators to assess the operation of the system, at the same time seeking to give rise to the broadest possible reflection on environmental themes and indicators among interested users in the public and academic sectors and in the general public.

National Forestry Information System (Sistema de Información Nacional Forestal). This system provides information on the Mexican forestry sector and its resources, the industry and the market for its products, as well as the legal framework governing forestry usage and conservation. It includes the forestry registry, inventory, production, industry, protection, legislation, culture and programs.³⁰

National Wildlife Information Subsystem (Subsistema Nacional de Información sobre la Vida Silvestre). As provided in the General Wildlife Law (Ley General de Vida Silvestre–LGVS), this subsystem regis-

^{30.} Article 10 of the Forestry Law establishes that Semarnat is responsible for integrating and updating information on the country's forestry resources. It also determines the data to be recorded in the National Forestry Registry, which is integrated into Sinia, along with updated results and zoning from the National Forestry Inventory.

ters, organizes, updates and releases information on the conservation and sustainable use of the nation's wildlife and habitats.³¹

Mexican Biodiversity Information Network (*Red Mexicana de Información sobre Biodiversidad*-Remib). ³² This network acts as a directory for information dispersed throughout academic and governmental institutions. It facilitates the exchange of information through electronic networks and improves the amount and availability of information, in addition to keeping it up-to-date. It also provides leadership in biodiversity understanding and communication through a computerized data network.

National Biodiversity Information System (Sistema Nacional de Información sobre Biodiversidad-SNIB). This system generates knowledge necessary for the conservation, management and sustainable use of biodiversity through the compilation and systematization of information.

National Fisheries Registry (*Registro Nacional de Pesca*).³³ The Fisheries Law (*Ley de Pesca*) establishes the obligation to keep a free public registry of individuals and entities that carry on this activity under a concession, permit or authorization, except for individuals who fish for sport or recreation. In addition, vessels must register in the National Public Maritime Registry (*Registro Público Marítimo Nacional*), as must aquaculture units, fishing schools and research or teaching institutions concerned with aquatic flora and fauna. The Fisheries Regulations establish the Secretariat's obligation to collect technical, scientific, administrative and statistical information to update the National Fisheries Registry and the National Fisheries Roster (*Carta Nacional Pesquera*).³⁴

Public Water Rights Registry (*Registro Público de Derechos de Agua*). In accordance with the provisions of Article 30 of the Law of National Waters (*Ley de Aguas Nacionales*–LAN) and Article 57 of the Regulations thereunder, since 1992 this registry has recorded the concession and allocation titles and permits for wastewater, title transfers, changes in characteristics, the suspension and termination thereof, and certificate transfer and issuance. The purpose of the registry is to estab-

^{31.} LGVS Article 49.

^{32.} Created during the first meeting of Directors of Institutions Involved in the Study of Biodiversity, by agreement with the directors of the institutions and the National Commission for the Knowledge and Use of Biodiversity (*Comisión Nacional para el Conocimiento y Uso de la Biodiversidad*–Conabio), as established in the Oaxaca Declaration

^{33.} Article 20 of the Fisheries Law

^{34.} Article 111 of the Regulations to the Fisheries Law.

lish greater legal certainty in this field and support the creation of a potential water market. The National Water Commission (*Comisión Nacional del Agua*–CNA) is responsible for its operation. The CNA web page http://www.cna.gob.mx> contains information on titles recorded in the registry. Information on specific water usage titles may be consulted at the CNA, and a certified copy of the information may be obtained upon payment of a fee.

Municipal Information Database System (Sistema de Información Municipal de Base de Datos). This system is an information archive with around 27,000 variables generated by census projects and the country's administrative records. It brings together census results and administrative records from INEGI containing national, state and municipal information in various areas, including environmental data. It enables the correlation of results from each to build derivative indicators and offers the possibility of creating topical maps to illustrate such indicators.

Economic Information Bank (*Banco de Información Económica*-BIE). The BIE uses a hierarchical model of successive descriptions. It includes more than 38,000 historical series with Mexican economic information, market indicators, data for all economic sectors, as well as regarding employment and unemployment, prices, foreign trade, and the environmental situation.

Program for the Access and Use of Pollutant Release Information (*Programa para el Acceso y Uso de Información sobre Emisiones Contaminantes*). The program promotes access to and use of pollutant release information by Mexican citizens and environmental groups. It carried out 14 case studies on environmental information requests to the government and developed a manual on the accessing and usage of pollutant release information.³⁵

Pollutant Release and Transfer Register (PRTR). See Section 7 below.

Air Monitoring System for the Mexico City Metropolitan Area (Sistema de Monitoreo Atmosférico de la Zona Metropolitana de la Ciudad de México-Sima). Sima continuously collects information on the types of pollutants released in the different urban-industrial areas and the weather conditions that may contribute to the improvement or wors-

Manual for the access and use of information on pollutant releases, Presencia Ciudadana, Mexico, 1999, p. 7.

ening of air conditions in the metropolitan area. To achieve this goal, Sima is composed of three networks: the Automatic Atmospheric Monitoring Network (*Red Automática de Monitoreo Atmosférico*–Rama), consisting of 32 stations (21 in the Federal District and 11 in Mexico State); the Manual Atmospheric Monitoring Network (*Red Manual de Monitoreo Atmosférico*), which collects information on suspended particles and elements contained therein; and the Meteorological Network (*Red Meteorológica*), with 10 monitoring stations sending information in real time to the Central Control System. This information is used along with that provided by the National Weather System to assess air quality during normal and extraordinary meteorological conditions.³⁶

Air Quality Metropolitan Index (Índice Metropolitano de la Calidad del Aire-Imeca). Imeca helps interpret air pollution concentration information, and establishes criteria for assessing air quality and the health effects of different pollutant concentrations.

Environmental Rules Compliance Index (Índices de Cumplimiento de la Normatividad Ambiental-ICNA). The ICNA is a combination of indices that measure compliance with various environmental rules. These indices support public awareness of the level of compliance for each pollution source and to incorporate parameters encouraging better compliance. The ICNA also allows the efficiency of pollution control programs to be evaluated by operators of the sources and by competent authorities. The indices cover Air Emissions, Hazardous Waste Generation, Hazardous Waste Services, Noise Emissions, Biological-Infectious Hazardous Waste Generation, High-Risk Activities, and Environmental Impact.

Environmental and Natural Resources Rules Compliance Information System (Sistema de Información sobre el Cumplimiento de la Normatividad Ambiental y los Recursos Naturales). It should be noted that the Environmental Legislation Documentation and Information Center (Centro de Documentación e Información sobre Legislación Ambiental—CDIA) was created to support Profepa's management of information generated within its jurisdiction.

Environmental Accounts System (*Sistema de Cuentas Ambientales***).** Complementary to the National Accounts System, this system describes the interaction of economic activities and the environment in order to analyze economic policies. Another information sys-

^{36.} Manual for the access and use of information on pollutant releases, Presencia Ciudadana, Mexico, 1999, pp. 109-110.

tem, the Ecological Net Domestic Product (*Producto Interno Neto Ecológico*), quantifies the cost of environmental pollution and the depletion of natural resources caused by economic activities in a given year. INEGI includes the Ecological Net Domestic Product in the National Accounts System. 37

Geographical Information System for Ecological Control (*Sistema de Información Geográfica para el Ordenamiento Ecológico*-Siore). Siore supports the development and analysis of environmental information on which ecological control is based.

Information System for Protected Nature Areas (Sistema de Información de las Áreas Naturales Protegidas). The INE web page includes information on the category, state and name of the protected nature areas in Mexico, as well as those given priority for conservation along with reefs and marine areas. It also includes maps of protected nature areas, management programs, decrees and ecotourism programs for Mexico's protected nature areas.

Environmental Laboratories and Monitoring. The Air Monitoring System for the Valley of Mexico Metropolitan Area (Sistema de Monitoreo Atmosférico de la Zona Metropolitana del Valle de México-SMAZMVM) and its Technical Commission have been in place since 1984, including air criteria, solar radiation, other toxic elements, suspended particles and hydrogen sulfide, among the most important aspects. The monitoring sites are operated by various institutions such as the Acatlán National School for Professional Studies of the National Autonomous University of Mexico (Universidad Nacional Autónoma de México-UNAM) and the Mexican Petroleum Institute.

Sinia provides a considerable amount of information and data, although taken together, these databases and web pages lack systematic and effective coordination.

In the last two years, Semarnat has held environmental information fairs to "report on the situation of existing information so that society may demand it, seeking to orient and encourage changes in our social and economic activities as producers and consumers, leading on a path of sustainable development." Regional information fairs also have begun to take place.

In addition to offering lectures on environmental topics, these fairs also invite academic institutions, nongovernmental organizations and

^{37.} LGEEPA Article 159 bis, third paragraph, and Article 15, paragraph XIX.

different state governments and environmental secretariats to provide information on the environment and natural resources.

The CDIA (see above), under INE, is geared toward the general public to promote environmental information to comply with the public's right to objective and timely information, as provided in LGEEPA Title V.³⁸ The CDIA contains environmental laws, information on natural resources, air and climate, health, environmental education, clean technologies, etc.

Communication with Citizen Attention Coordination of the Office of the President has been strengthened in order to provide timely and efficient citizen attention. 39

The LGEPA provides for the creation of an Environmental Information System for the Federal District that, in coordination with Sinia, is intended to register, organize, update and release Federal District environmental information. $^{\rm 40}$

The Environment Secretariat of the Federal District and the delegations must issue an annual public report on the state of the environment and natural resources under their respective jurisdictions.

The Mexico City government has an Environmental Information Center,⁴¹ which compiles, processes and releases the city's environmental information. It consolidates and assembles environmental information generated in the Mexico City Metropolitan Area, and operates as a support tool for environmental management and decision-making.

The LGEEPA Regulation on Air Pollution Prevention and Control sets forth Semarnat's obligation to establish and maintain a National Air Quality Information System (*Sistema Nacional de Información de la Calidad del Aire*). ⁴² The Hazardous Waste Regulation establishes a similar obligation for the Hazardous Waste Generation Information System (*Sistema de Información sobre Generación de Residuos Peligrosos*). ⁴³

^{38. &}lt;a href="http://www.ine.gob.mx/dggia/cent_doc/cdia.htm">http://www.ine.gob.mx/dggia/cent_doc/cdia.htm.

First Report of Semarnat Activities, 2001, General Bureau of Statistics and Environmental Information, Mexico.

^{40.} Article 76 of the Environmental Law of the Federal District.

^{41. &}lt;a href="http://sma.df.gob.mx">.

^{42.} Articles 41 through 45 of the LGEEPA Regulations on Air Pollution Prevention and Control.

Article 4 of the LGEEPA Regulations on Hazardous Waste, published in the DOF on 25 November 1988.

Individual right to access to environmental information

Pursuant to Article 159 bis 3 of the LGEEPA, all individuals and entities are entitled to have Semarnat and the state, Federal District and municipal authorities make environmental information available upon request, regardless of whether they are directly affected by the matter in question. 44 Section 8 below analyzes a series of exceptions to the right to information.

The LGEEPA governs environmental matters under Article 8 of the Constitution, discussed above, with regard to the right of petition. It determines the type of information that may be requested, the formalities to be followed, and the cases in which the authority may deny such information. It considers environmental information to be "written, visual or database information held by environmental authorities concerning water, air, soil, flora, fauna and natural resources in general, as well as activities or measures that affect or may affect the like."

Formalities for accessing information under the LGEEPA are minimal.⁴⁶ The request must be filed in writing, clearly specifying requested information and the reasons for the petition, and indicating the name or business name and the domicile.

A novel aspect of the LGEEPA is the inclusion of an obligation for the environmental authority to respond to petitions within 20 days. In the Mexican legal system, authorities usually have three months to respond.⁴⁷ Article 159 bis 5 of the LGEEPA states that when the authority

^{44.} This legal provision, contained in LGEEPA Article 159 bis 3, is in concordance with the criteria held by the courts in the sense that the exercise of the right of petition does not require evidence of legal interest. The following legal precedent applies: "PETITION, RIGHT OF. The argument is inaccurate that the right of petition, contained in Constitutional Article 8, is subject to the petitioner's proof of legal interest in the object of his petition, as the guarantee under said provision is only conditioned on its filing in writing, in a peaceful and respectful manner." Federal Judicial Weekly, vol. LXXVII, third part, p. 25, Injunction review 6176/63, José Guadalupe Arontes Blancas, 28 November 1963, 5 votes. However, the basic diagnostic and preventive and corrective measures to be undertaken as a result of environmental audits are made available only to those who are or may be directly affected. Furthermore, confidentiality must be respected pursuant to Article 52 of the Industrial Property Law.

^{45.} LGEEPA Article 159 bis 3.

^{46.} Right of petition. Constitutional Article 8 does not subordinate the response or any other aspect of the petition guarantee to the petitioner's compliance or noncompliance with determined regulatory requirements. Federal Judicial Weekly, vol. XIX, third part, p. 63, Injunction review 4916/58, Juan N. Canales, 19 January 1959, unanimity of four votes.

^{47.} LFPA Article 17.

denies a request, the response must state the reasons for the determination. However, the LGEEPA provides that if the environmental authority does not issue its response in writing within the aforesaid period, "the petition shall be understood to be denied." This could allow the authority to let the period run out and thus avoid providing a legal reason for denying the requested information.⁴⁸ In any case, if the information request is denied, the private individual can apply directly to the administrative courts seeking nullification or to the federal courts to dispute the basis of the *deemed denial*.⁴⁹

The LGEEPA establishes the right of private individuals to file an application for review when they consider that the authority is affecting their interests in denying access to the requested information. In addition to this administrative remedy, private individuals have other legal options for demanding disclosure of information: an injunction (*amparo*) requiring the authority to respect the guarantees set forth in Constitutional Articles 6 and 8, and a criminal complaint under the Federal Penal Code (*Código Penal Federal*), which classifies a public servant's undue impediment to filing or processing a request as a criminal abuse of authority.⁵⁰

Lastly, it should be noted that the right to information implies the obligation to use it properly. In accordance with Article 159 bis 6 of the LGEEPA, the misuse of such information leads to civil liability for damages.

^{48.} The lack of legal basis and reasoning in a *deemed denial* cannot be disputed in court, as it is not actually an act of the authority and therefore the formality requirements for legal acts do not apply. Only the basis of the denial, and not the lack of formality, may be disputed. See the thesis of the Second Collegial Administrative Court on the First Circuit. "DEEMED DENIAL. CANNOT BE DISPUTED ON THE ABSENCE OF BASIS AND REASONING. The ruling of deemed denial, a legal fiction arising from the silence of the administrative authority, is intended to constitute an element of action the exercise of which allows the actor to initiate a nullification proceeding, in lieu of an express act. Therefore, even when the negative silence constitutes the disputed act, there is no real administrative ruling, as it lacks the will of the authority that issues it. It is thus not subject to interpretation or appeal, as it lacks the constitutional requirements of basis and reasoning and is only a fiction arising by will of the citizen, and can only be examined in terms of its fundamental basis." Direct injunction 122/91, Fivisa, S.A. de C.V., 25 April 1991. Unanimity of votes. Author: Carlos Amado Yáñez. Clerk: Mario de Jesús Sosa Escudero.

^{49.} In this case, the review appeal set forth in the LGEEPA, with the same authority that issued the *deemed denial*, does not apply, considering the decision of the Second Collegial Court on the Sixth Circuit. "DEEMED DENIAL, DISPUTE NOT APPLICABLE WITH THE SAME AUTHORITY THAT ISSUED IT." Direct injunction 394/91, Gloria Violeta Contreras, 9 May 1991. Unanimity of votes. Federal Judicial Weekly, eighth period, vol. XIV, July, second part, p. 671.

^{50.} Article 215, paragraph III.

1.6 Environmental Law of the Federal District

The Environmental Law of the Federal District⁵¹ clearly establishes the "duty of environmental authorities of the Federal District to guarantee that citizens have access to information on the environment and the participation of society in general," ⁵² in matters governed by the Law.

In the chapter on "Environmental Information," the Law guarantees the right of all persons to access any environmental information requested in writing.⁵³ (Section 8 below discusses a series of exceptions to the right to information.)

The Law establishes that where the authority denies an information request, it must state the reasons for such determination. It establishes a response period of no more than 20 business days from the date on which the request was received. 54

If the authority does not respond within the allotted period, the petitioner should consider the request denied pursuant to Article 89, paragraph II and following of the Law, and may file the corresponding measures of defense.

2. ENVIRONMENTAL IMPACT ASSESSMENT

This section discusses the laws, regulations and policies on public access to information derived from environmental impact assessment (EIA) procedures. It covers the LGEEPA and the new environmental impact regulation thereunder,⁵⁵ as well as the environmental laws of some Mexican states.

Environmental jurisdiction is exercised concurrently at the three levels of Mexican government: federal, state and municipal. The LGEEPA distributes jurisdiction as follows: the federal government has jurisdiction over EIAs for works or activities expressly referenced in LGEEPA Article 28; the states are responsible for EIAs for works or activities not expressly reserved for federal jurisdiction under the

^{51.} Published in the Official Gazette of the Federal District (*Gaceta Oficial del Distrito Federal*) no. 6, 13 January 2000.

^{52.} Article 18, paragraph IV of the Environmental Law of the Federal District.

^{53.} Article 75 of the Environmental Law of the Federal District.

^{54.} Article 77 of the Environmental Law of the Federal District.

 $^{55. \}quad Published \ in \ the \ DOF \ on \ 30 \ May \ 2000.$

LGEEPA; and the municipalities participate in EIAs for works or activities under state jurisdiction when undertaken within their territorial jurisdictions. 56

Under the most recent LGEEPA reform,⁵⁷ Article 11 allows for coordination agreements between the federal and state governments so that the states may take over EIAs in areas that, until December 2001, fell exclusively under federal jurisdiction. This coordination excludes strategic works and activities, which remain reserved for the federal government.

2.1 Federal law

Right to access to information

The LGEEPA defines the EIA as an administrative procedure under Semarnat responsibility, which the authority uses to "establish the conditions applicable to the undertaking of works and activities that may cause ecological imbalance or exceed the limits and conditions established in the applicable provisions for the protection of the environment and the preservation and restoration of the ecosystems, in order to prevent or reduce to a minimum the negative effects thereof on the environment." ⁵⁸

The LGEEPA establishes the compulsory nature of prior environmental impact authorizations to carry on works or activities that cause or that may cause significant effects on the environment or natural resources, which cannot be properly regulated by instruments such as standards, licenses, environmental rules or others. To obtain an environmental impact authorization, interested parties must file an Environmental Impact Statement (EIS). The LGEEPA contains a specific list of those works or activities whose environmental impacts are subject to assessment by the federal government.

Public participation in EIAs was broadened under the 1996 LGEEPA reform.

Article 34 of the LGEEPA states that once an EIS is received and incorporated into the respective file, the authority shall make it available

^{56.} LGEEPA Article 35 bis 2 allows for a more precise definition of the allocation of competencies among the federal, state and municipal governments.

^{57.} Published in the DOF on 31 December 2001.

^{58.} LGEEPA Article 28.

to the public. Semarnat publishes the environmental impact authorization request in the Ecological Gazette.⁵⁹ Within five days from the date the EIS is filed with the Secretariat, the project proponent must also file, at its own expense, a project summary for the work or activity in a state newspaper with wide circulation.

Within 10 days after the publication of the project summary, any citizen may request that the Secretariat make the EIS publicly available in the corresponding state.

The public consultation on the EIA process, provided for in Article 34 of the LGEEPA is a major reform in the area of public environmental participation. It should be noted that this public consultation process needs to be regulated.

There are some restrictions on accessing information filed by the proponents of the work or undertaking. Upon filing the EIS, they may request that information included in the file be reserved, if its public disclosure could affect industrial property rights and the confidentiality of commercial information. This provision is congruent with the supplementive application of the LFPA. 60

Article 34 states that the Secretariat, in conjunction with local authorities, may organize public information meetings at which the proponent may explain the technical environmental aspects of the work or undertaking. To carry out this function, the General Bureau of Environmental Impact and Risk is responsible for "calling or conducting, when deemed necessary, technical and public hearings on projects entering the environmental impact assessment process."

Within 20 days from the date on which the Secretariat makes the EIS publicly available, any interested person may suggest the establishment of additional prevention and mitigation measures and any observations deemed pertinent.

^{59.} This publication in the Ecological Gazette is also mentioned in LGEEPA Article 31, last paragraph: "The Secretariat shall publish, in its Ecological Gazette, the list of preventive reports filed pursuant to this Article, which shall be publicly available."

^{60.} The LFPA states in Article 33: "The interested parties in an administrative procedure have the right to know, at any time, the status of their proceeding through timely information collected at the corresponding offices, except when they contain information on national defense and security, they related to matters protected by commercial or industrial secrecy, where the interested party is not the named or affected person in the matter, or in the case that a legal provision so prohibits."

The Secretariat adds to the file observations made by interested persons and records the public consultation process and the results of observations and proposals made in writing.

The inclusion of observations and proposals from public consultations is, in the end, a decision made at the discretion of the environmental authority. Furthermore, not all requests from interested parties, in their capacity as members of the community, will necessarily lead to a public consultation, as the environmental authority considers the particular circumstances of each case and decides accordingly.

It should be noted that this mechanism for making information publicly available also applies to *preventive reports*. These reports are filed for works or activities that are exempt from EISs under the Law. The last paragraph of Article 31 of the LGEEPA states that "the Secretariat shall publish in its Ecological Gazette the list of preventive reports filed pursuant to this article, which shall be made publicly available." However, the right to access information applies only to the consultation stage of the reports and files.

Access policies

The National Development Plan (*Plan Nacional de Desarrollo*) for 2001-2006 provides that the strategy in the area of environmental regulation will be to focus on consolidating and integrating existing legislation. In particular, it seeks to strengthen the application of EIA studies and to improve rules for hazardous waste handling. 61

The National Environment and Natural Resources Program 2001-2006 states that ordinary citizens will have access to information that allows them to know about the state of the environment in which they live and the manner in which it affects their economic and social well-being. It provides that citizen complaints will always be attended to. It notes that federal management of the environmental sector may be assessed by the public through the use of environmental performance indicators, as Semarnat has established indices and goals allowing for the clear evaluation of performance and facilitating accountability regarding its management.

The federal government unit responsible for EIAs is the General Bureau of Environmental Impact and Risk, empowered under Article 25

^{61.} National Development Plan 2001-2006, p. 122.

of the Semarnat Internal Regulation to enforce the general policy in this area, to rule on EISs and reports, and to issue, as required, authorizations for the undertaking of work or activities under federal jurisdiction. It also oversees the public consultation process regarding projects submitted for EIA procedure and, as applicable, organizes the participation of the administrative units having jurisdiction within Semarnat as provided in applicable statutory provisions. The General Bureau also makes preventive reports and EISs publicly available and answers the publication of the relevant information on the work or activity in question in the Ecological Gazette.

Ease of access

Most executive summaries of draft EIAs may be consulted at the INE offices and via the Internet. 62

Access periods

EIA reports may be consulted at any time after Semarnat assembles the file. In addition, when a public consultation is conducted under LGEEPA Article 34, the proponent of the work or undertaking must publish a project summary in a state newspaper with wide circulation, within five days following the filing of the EIS.

Citizens also may request that Semarnat make the EIS publicly available in the respective state, within 10 days from the publication of the project summary. In the case of a public consultation, within 20 days after Semarnat makes the EIS publicly available, any interested person may propose the establishment of additional prevention and mitigation measures as well as any observations that person deems relevant.

2.2 State law

Right to access

Mexico's 31 states and the Federal District have their own environmental protection laws that provide for and regulate the EIA process. With the exception of three states, all of these laws establish the right to information resulting from such a process.⁶³

^{62. &}lt;a href="http://www.ine.gob.mx/INE/documentos/dgoeia/mias.html/">http://www.ine.gob.mx/INE/documentos/dgoeia/mias.html/.

^{63.} Colima, Nayarit and Tlaxcala.

Within the EIA procedure, the Environmental Law of the Federal District sets out a procedure for accessing documents filed with the Environment Secretariat of the Federal District:

Article 49.- Once the competent authority receives an environmental impact statement, within the five following business days it shall assemble the respective file and make it publicly available, in order that it may be consulted by any person.

Proponents of the work or undertaking may request that information included in a file be reserved, if its public disclosure could affect industrial property rights and the confidentiality of commercial information provided therein.

Article 50.- The competent authority may undertake a public consultation in accordance with the provisions of the Citizen Participation Law and the Regulation under this law.

Article 51.- The proponent must publish, at its own expense in a nationally circulated newspaper, a summary of the project. Persons participating in the public consultation may present their observations or comments to the Secretariat in writing, within five business days following the call for consultation.

Once observations and comments are presented, the Secretariat shall weigh and consider them at the time it rules on the environmental impact authorization.

As applicable, the Secretariat must respond to interested persons in writing, justifying its reasons for not having considered the comments to which the first paragraph of this article refers in the ruling. Affected parties may avail themselves of the remedy, to which this Law refers, to contest the resolution by which the Secretariat puts an end to the environmental impact assessment procedure.

Article 52.- In performing the environmental impact assessment, the competent authority shall take into account the territory's ecological control programs, urban development programs, declarations of protected nature areas, management programs, the applicable standards and all other applicable legal provisions.

Persons who feel that their observations were not adequately studied or considered may apply for review proceedings under the Law of Administrative Procedure of the Federal District.

The states of Baja California Sur, Campeche, Coahuila, Chiapas, Guanajuato, Chihuahua, Guerrero, Hidalgo, Morelos, Nuevo León,

Puebla, Querétaro, Sinaloa, San Luis Potosí, Tabasco, Veracruz, Yucatán and Zacatecas also include provisions regulating access to information in the EIA process. For example, the Ecology Law for the State of Guanajuato provides:⁶⁴

Article 38.- Once the State Ecology Institute assembles the file on the environmental impact request, it shall make it publicly available in order that it may be consulted by any person.

The proponents of a work or undertaking may require that information included in the file be reserved, if its public disclosure could affect industrial property rights and the confidentiality of commercial information provided therein.

The environmental legislation of the states of Sonora and Tamaulipas contains similar provisions.

Opportunities to access information in Baja California are broader, as files are made publicly available at government offices and the complete file must be published in the official state journal. Conversely, Article 54 of the Baja California state environmental impact regulations restricts access to information by requiring that the interested person demonstrate his or her legal interest and the need for access to the information contained in the files. To maintain the secrecy of any part of the information, those interested in doing so must indicate clearly to the bureau, in a section of the document, which information constitutes a technical secret, the publication of which could affect industrial property rights or legal interests of a commercial nature. In such cases, information must be presented in a manner that allows it to be examined, with regard to the environment or public health, without causing harm to the interested party.

In order to broaden access to information, the Law of Ecological Balance and Environmental Protection of the State of Quintana Roo⁶⁵ provides that proponents of works or undertakings must file an EIS with copies for public consultation at the official libraries of each municipal government. Environmental groups that operate regularly in the state may request copies of the EIS files from the respective libraries or from the Department of Public Works and Urban Development, which must provide them within five days.

^{64.} Published in the State Official Gazette on 8 February 2000.

^{65.} Published in the State Official Gazette on 14 April 1989.

Access policies

The policy in Mexico's states is to allow public access to information filed in the EIA procedure, in all cases providing for the reservation of certain information, except in three states that do not regulate these matters.

Ease of access

All states in the country have established authorities responsible for administering and enforcing environmental laws in force in their respective territories. However, ease of access is still limited because the information is concentrated in government offices located in the capital cities. The information must be accessed personally at such offices, requiring persons to travel to state capitals to view the files. In the state of Aguascalientes, the Law of Ecological Balance and Environmental Protection provides:

Article 92.- Once the request and the documentation to which the preceding articles are filed, the Secretariat shall notify the corresponding municipal authorities of the existence of the application, requesting their point of view on the matter.

The opinion of the municipal government must be expressed to the Secretariat within 10 business days from the day following the day on which the notice is received.

If the municipal government does not issue any opinion within this time period, it shall be understood not to have any objections regarding the matter.

Considering the above, efforts are needed to forward the information to each state's municipalities and to create information systems enabling online access. The costs of these mechanisms are an impediment to their timely completion.

Access periods

In the federal sphere, environmental impact information may be consulted at any time after the proponent of the work or undertaking submits it to the authority and the authority includes it in the respective file. Thus, the public has access to project information only after the EIA is finished, making it impossible to have any influence over the contents of the assessment.

On the other hand, as an example at the local level, the Federal District has specific provisions allowing for public comment on EISs within five business days following the publication thereof.

Cost

The cost of publishing an EIS is borne by the proponent of the work or undertaking and consultation of the information is free. A reduced cost applies only when copies of the files are requested.

3. PERMITS AND AUTHORIZATIONS

A permit, license or authorization is the act by which an administrative authority grants the power or right to a private individual to carry on works or activities.

Generally, the procedure to grant permits and authorizations involves filing the request and complying with the requirements set forth in the law and regulations. The interested person is notified directly of the administrative ruling for the granting or denial thereof, and no public announcement is made in any medium.

Notwithstanding the above, it is possible to access formal documents containing the ruling as well as documents filed by the interested person. As discussed above, Article 159 bis 3 of the LGEEPA entitles all persons to receive any environmental information requested from the authorities, as provided in the Law. This same provision defines environmental information as any "written, visual or database information held by the environmental authorities regarding water, air, soil, flora, fauna and natural resources in general, as well as activities or measures that affect or may affect them." The object of the right of access is thus the information held in public offices, given that files, records and documents kept by the administration are not the only instruments that enable the exercise of that right, but also qualify as property in the public domain pursuant to the General Law of National Properties (*Ley General de Bienes Nacionales*).66

Environmental laws do not provide for public participation in the granting of permits and authorizations, except for public consultation on EIAs as discussed in Section 2.

Article 2, paragraph XI of the General Law of National Properties, published in the DOF on 8 January 1982.

According to the recently reformed Article 109 bis of the LGEEPA, Semarnat, the states, the Federal District and the municipalities are required to create an information system based on, among other things, the environmental authorizations, licenses, concessions or permits processed by the respective authorities. This is the case of the abovementioned Federal Registry of Procedures and Services (RFTS).

Various states also have registries of procedures and services.

In addition to these registries, the various reports submitted by Semarnat contain overall numbers permits, licenses and authorizations issued. These include the Report on the General Situation of Ecological Balance and Environmental Protection, presented twice a year, and the activity reports submitted each year by Semarnat.

The Semarnat web page contains information on the granting of permits and authorizations in some areas, as described below.

Industrial inspection, regulation and oversight

This section contains information on the number of operating licenses issued to fixed sources under federal jurisdiction by state, for the period 1988-1999; the number of comprehensive environmental licenses issued to fixed sources under federal jurisdiction by state, for the period 1997-1999; and the number of authorizations issued to companies for the handling of hazardous industrial waste, for 1999.

Wildlife

Information is provided on:

- The areas of registered Conservation, Handling and Sustainable Use Units, by type of property;
- Permits issued for sport hunting during hunting seasons, 1994-1998;
- Number of permits issued for the capture of ornamental birds and songbirds, by state, 1994-1998;
- Issuance of certificates under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 1996-1998;

- Permits issued for scientific collection, by state, 1996-1998; and
- · Permits to carry on activities in protected nature areas.

Cost

Access to registries is free. Where copies of the data entered in the records are required, the requester must pay the reduced fee.

4. PLAN AND PROGRAM PROPOSALS

This section describes mechanisms for public access to proposed plans and programs of the environmental authority.

Right to access

Constitutional Article 26 expressly provides the State with powers to carry on planning activities, and establishes the bases for public, private and social involvement in the National Participative Planning System (Sistema Nacional de Planeación Participativa).⁶⁷ This article provides:

Planning shall be democratic. Through the participation of the various social sectors, the aspirations and demands of society shall be collected to include them in the development plan and programs. There shall be a National Development Plan binding upon the programs of the Federal Public Administration...

The National Participative Planning System is thus conceived as a social participation process in which the reconciliation of interests and national efforts enable the achievement of objectives supported by society as a whole.⁶⁸ It should be noted that when, as regards integrating social participation into plans and programs, there are no mechanisms forcing the government to carry out such integration. However, there has been great improvement in the last few years, as society begins to participate more in the National Development Plan and public comment is sometimes requested on legislative drafts.

^{67.} With this system the federal government seeks to promote a process for the definition, agreement, follow-through and assessment of the policies and actions of the federal public administration, in addition to including public opinion through citizen participation mechanisms.

A clear example is the National Development Plan 2001-2006, in which citizen participation is done through mail and Internet surveys and in citizen participation meetings.

The Planning Law (*Ley de Planeación*)⁶⁹ regulates Constitutional Article 26 and is intended, among other things, to establish the basic standards and principles governing national development planning, which directs the activities of the federal public administration, and to set the basis for promoting and guaranteeing the democratic participation of the various social groups, through their representative organizations, in the development of government plans and programs. Article 13 of the Law states that the National Democratic (Participative) Planning System, and the planning process applicable to the development, implementation, control and assessment of the Plan and programs, shall be set out in regulations. However, in November 2001, there is still no regulation for this Law.

The National Development Plan specifies the national objectives, strategy and priorities for the country's overall development; budgeting of resources to be allocated for such purposes; instruments and persons responsible for the execution thereof; and global, sectoral and regional policy guidelines. Its provisions refer to the whole of economic and social activity. It applies only to plans and programs within the scope of the following categories: national, sector, institutional, regional or special in which the federal executive branch is required to undertake national development planning with the democratic participation of social groups.

Article 20 of the Planning Law states:

The National Democratic Planning System shall include the participation and consultation of the various social groups, in order that the people may express their opinions for the development, updating and execution of the Plan and programs to which this Law refers.

The representative organizations of worker, peasant and popular groups; academic, professional and research institutions; business organizations; and other social groups, shall participate as permanent consultative bodies in the aspects of democratic planning related to their activities, through popular consultation forums organized for such purpose. The Deputies and Senators of Congress will also participate in these forums.

For this purpose, and in accordance with the applicable laws, the System must provide for the organization and operation, formalities, timing and terms applicable to participation and consultation in national development planning.

^{69.} Published in the DOF on 5 January 1983.

For its part, the LGEEPA establishes that the federal government must promote society's participation in the planning, execution, assessment and oversight of environmental and natural resources policy. For this end, Article 158 paragraph I states that Semarnat "shall call, under the National Democratic Planning System, on worker, business, peasant, farm, fishery and forestry organizations, agrarian communities, indigenous communities, educational institutions, nonprofit social and private organizations and all other interested persons to express their opinions and proposals."

Although the public has the right to participate in the planning process through the popular consultation forums, it has no such right to participate in the drafting of the plans and programs. The LGEEPA definition of environmental information does not include environmental plans or programs. The inclusion of plans or programs in information subject to public disclosure would facilitate the clarification or modification of a proposal at the development stage, instead of back-dating the administration's actions because of changes from the final draft released to the public.

Access policies

Article 32 bis, paragraph XVII, of the Organic Law of Federal Public Administration empowers Semarnat to "[p]romote the participation of society and the scientific community in the development, enforcement and oversight of environmental policy and to agree on actions and investments with the social and private sectors for environmental protection and restoration." Article 159 of the LGEEPA promotes the creation of "consultative bodies in which the entities and agencies of the public administration, academic institutions and social and business organizations shall participate."

For this purpose, Semarnat has developed a system of social participation at the various levels of public inquiry, beginning with daily local attention and interaction and the presence and organization of state forums and councils. These local bodies are related to the national technical (topical) councils on soil, forestry and protected nature areas.

Sustainable Development Advisory Boards (*Consejos Consultivos para el Desarrollo Sustentable*–CCDS) were created in 1995, with one national and four regional bodies based on criteria intended to ensure broad representation of civil society and the presence of renowned Mexicans from the governmental, academic, social, nongovernmental and private business sectors.

More recently, a notice was issued in September 1998, in accordance with the CCDS regulations, announcing that half of the social, business, academic and nongovernmental representatives would be replaced. The essential requirements for sitting on these boards were that the individual be a Mexican citizen in full exercise of his or her rights, with recognized scientific, technical, academic or social merit in the fields of environmental protection and sustainable use of natural resources, and to be named by each of the sectors involved based on consideration of the plurality and presence of the most representative organizations.

The boards have permanent commissions and working groups for specific topics. In conjunction with the technical secretariats, these groups must systematize the suggestions submitted by the members to propose concrete actions and specific approaches.

As provided in the decree for the creation of the boards published in the DOF on 21 April 1995, the call for nominations, published on 31 March 1995, and the internal working regulations, the boards have the following functions:

- a. To advise Semarnat on the design, implementation and assessment of national strategies for the environment and use of natural resources, in accordance with the national situation and needs and with international commitments.
- b. To propose and implement recommendations to Semarnat on policies, programs, studies and specific actions involving the environment and use of natural resources, ensuring that such recommendations are presented in the form of draft program budgets.
- c. To periodically assess the results of applied programs involving the environment and use of natural resources, based on reports provided by Semarnat or studies performed or promoted by the Board.
- To analyze specific matters and cases submitted by Semarnat for its consideration.
- To promote public consultation and deliberation, and agreements on national strategies required for sustainable development.
- f. To prepare recommendations to improve the laws, regulations and procedures involving the sustainable use of natural resources and environmental improvement.

- To promote or perform studies contributing to the design, improvement or assessment of Semarnat policies.
- To coordinate with similar state, regional, national and international organizations to exchange experiences that may be mutually beneficial.
- To offer opinions on the guidelines governing Semarnat's participation in international forums.

In accordance with its Internal Regulation, each Regional Advisory Board has one state representative from each of the abovementioned sectors.

The following relevant subjects have been attended to by the National Advisory Board:⁷⁰

- Discussion of amendments to the LGEEPA and holding LGEEPA analysis meetings called by the National Advisory Board, where the boards were an important factor for unanimous congressional approval.
- Board members' participation, via the mechanism developed and approved by the National Board's NAFTA-NAAEC Commission, in three public consultations conducted by the CEC's Joint Public Advisory Committee.
- Assessment by the national sustainable development boards (of the United States, Canada and Mexico) in the NAFTA region, five years after Rio.
- Preparation and discussion of the general assessment of the performance of the sustainable development advisory boards, by the operating group of the National Advisory Board.

Ease of access

The National Development Plan was published in the DOF on 30 May 2001. While not officially published, the Environment and Water Programs 2001-2006 may be consulted at the Semarnat web page at http://www.semarnat.gob.mx.

Cost

Publications may be viewed free of charge at the information centers. The environmental plan and programs are publicly available at a reasonable cost. Copies of these documents may be obtained via the Internet at no cost.

5. LAWS, REGULATIONS AND STANDARDS

This section discusses legal mechanisms in force allowing the public to participate in the process of developing environmental laws, regulations and standards.

5.1 Laws

Under the Mexican constitutional system, the power to table draft legislation or amendments before Congress is reserved for the President of the Republic, the deputies and senators of Congress and the state legislatures.⁷¹

Although the power to table drafts is reserved to the authorities described above, Mexican law allows citizens to present petitions directly to Congress.⁷²

The legislative process includes public consultation forums in which citizens and groups interested in draft laws under discussion in congress may express their opinions. The results of such consultations provide legislators with important information. For example, the Secretariat of the Interior (*Secretaría de Gobernación*) undertook a consultation in preparing the initial draft of the Law of Access to Public Information, in which certain interested sectors participated.

5.2 Regulations

The President's exclusive power to issue administrative regulations is set forth in Section I of Constitutional Article 89. This provision establishes the power of the federal executive branch to promulgate and administer laws enacted by Congress, being responsible at the administrative level for their exact observance.

^{71.} Constitutional Article 71.

^{72.} Article 61 of the Regulations for the Internal Governance of the General Congress of the United Mexican States.

There is no legal mechanism allowing for public participation in the development of regulations.

5.3 Standards

Article 36 of the LGEEPA establishes Semarnat's obligation to issue Mexican Offical Standards (*Normes Oficiales Mexicanas*–NOMs) on the environment and the sustainable use of natural resources, as follows.

I. To establish the requirements, specifications, conditions, procedures, goals, parameters and allowable limits to be observed in the regions, zones, basins or ecosystems, in the use of natural resources, in the undertaking of economic activities, in the use and allocation of properties, and in processes;

II. To consider the conditions needed for public well-being, the preservation or restoration of natural resources, and environmental protection;

III. To stimulate or compel economic agents to reorient their processes and technologies toward environmental protection and sustainable development;

IV. To provide long-term investment certainty and compel economic agents to assume the costs of the environmental effects they cause; and

V. To promote production activities in a framework of efficiency and sustainability.

Issuing and amending environmental NOMs is done in accordance with a procedure set out in the Federal Law of Measurements and Standards (*Ley Federal sobre Metrología y Normalización*). This Law establishes the legal framework for promoting transparency and efficiency in the development and enforcement of NOMs and Mexican Standards (NMX). In accordance with Article 47 of the Law, the procedure is as follows:

The full text of NOM drafts are published in the DOF, so that interested parties may present their comments to the National Advisory Committee for Environmental Protection Standards (*Comité Consultivo Nacional de Normalización para la Protección al Ambiente*–CCNNPA)

^{73.} Published in the DOF on 1 July 1992.

within the following 90 calendar days.⁷⁴ During this period, the analyses used in developing the NOM draft are publicly available for consultation at the Committee.

At the end of this period, the CCNNPA studies the comments received and, as applicable, makes changes to the draft in a period not to exceed 45 calendar days.

The authority must order the publication of responses to comments received before publishing the NOM.

This procedure must be observed at all times in order for the standard to have full legal effect. However, the Law establishes the possibility of not following the procedure in cases of emergency. In these cases, the competent authority may prepare NOMs directly without first developing drafts or advance drafts, ordering the publication thereof in the DOF for a maximum period of six months. In no case may the same standard be issued more than twice on the basis of an emergency argument. If the authority that developed the emergency standard decides to extend the effective period or make it permanent, it must present it as an advance draft and follow the ordinary procedure for its approval.⁷⁵

While the development of NOMs is primarily the responsibility of the public authority, the Federal Law of Measurements and Standards establishes the possibility for the public to present its own drafts. The last paragraph of Article 44 of the Law states: "Interested persons may present proposals for Mexican official standards to the agencies, which shall conduct the necessary assessment and, as the case may be, present the advance draft in question to the respective committee."

Right to access

For full legal effect, federal legal provisions must be published in the DOF. ⁷⁶ In addition to publication in the DOF, Constitutional Article 120 provides that "the governors of the states are required to publish and ensure the enforcement of federal laws." This publication is intended to

^{74.} The Committee includes the participation of different interested parties and representatives of the economic activity sectors. It has seven subcommittees: ecological usage of natural resources, solid and hazardous materials and waste, air, fuel quality, water, environmental risk, and polluting energy. Each subcommittee has one or more working groups.

^{75.} LGEEPA Article 48.

^{76.} Article 2 of the Law of the Official Gazette of the Federation and Government

facilitate state residents' knowledge of federal laws. Specifically with regard to environmental matters, the LGEEPA provides for the publication of the Ecological Gazette as a source of official information on relevant legal provisions.

Ease of access

The public is guaranteed access to the DOF, which is published by the Secretariat of the Interior. The publication is available at the entity's offices and from newspaper and magazine stands. There are also online services offering DOF access via Internet.⁷⁷ Through the General National Archives, the Secretariat of the Interior has published a compact disc collection containing the full text of the DOF from 1973 to date, as well as the indices for documents published from 1917 to 1972.

Furthermore, Congress has a compilation of federal laws in force that may be consulted at its library or through the web page http://www.cddhcu.gob.mx/leyinfo/.

The Ecological Gazette published by INE may be consulted at the documentation centers of the various Semarnat offices. Published quarterly, this publication may also be accessed via the Internet.⁷⁸

All federal laws, regulations and environmental NOMs in force are compiled by Semarnat and may be consulted at the Internet address http://www.semarnat.gob.mx>.

In 1996, Semarnat produced a compact disc entitled "Mexican Environmental Summary. Current Environmental Management" (*Breviario Ambiental Mexicano. Gestión Ambiental Actualizada*), compiling federal laws and regulations relating to the Secretariat's various activities and the environmental NOMs has issued. It also includes the environmental laws of all Mexican states. Semarnat is working on an updated version of the disc, expected for 2002.

The INE also has a section on its web page http://www.ine.gob.mx/ called "legal framework," in which the laws, regulations, international treaties and environmental legislation in general may be consulted. A listing of INE publications may also be found at the page http://espejo.ine.gob.mx/upsec/publicaciones>.

^{77. &}lt;a href="http://www.cpware.com/dof/dof_menu.htm">http://info.juridicas.unam.mx/infjur/leg/dof/2000/> - 79k.

 $^{78. \}quad < http://espejo.ine.gob.mx/upsec/publicaciones/consultaListaPub3.php>.$

Furthermore, the INE web page http://espejo.ine.gob.mx/ has a special Sinia section containing plans, programs and rules relating to the following topics: Biodiversity, Risk and Waste, Legal Framework, Urban-Industrial Matters, International Instruments, Ecological Enforcement, Environmental Economy, Sector Programs, Environmental Indicators, and Sustainable Development. It also contains information on environmental commissions and centers.

At the state level, environmental laws can be consulted in each state's official bulletin and in the local congresses' libraries. Several law libraries also compile state legislation, as do the Supreme Court, the General National Archives and the UNAM Legal Research Institute.

Nearly all state web pages contain state laws, such as <www.df. gob.mx>, <www.colima.gob.mx>; <www.guanajuato.gob.mx>, etc. The UNAM web page also has a site where state laws may be accessed: http://info4.juridicas.unam.mx/>..

Cost

Official publications such as the DOF and the Ecological Gazette have low prices, as the prices are intended merely to recoup publication costs. Public services accessed via Internet are free, as the documentation centers and law libraries. Due to their higher costs, access to private services is limited to persons and organizations with greater economic means.

6. COMPLIANCE ACTIONS AND LAW ENFORCEMENT

This section covers legal provisions relating to public access to information obtained by environmental authorities in regard to compliance and enforcement of environmental laws.

Right to access

Voluntary measures are an important part of compliance in Mexico. Voluntary rules involve agreements between businesses and the environmental authority to raise environmental requirements above what is provided in official standards, or to fill gaps in the rules. Thus, persons responsible for the operation of a business may, by choice, perform a methodological examination of their operations with respect to the pollution and risk generated and the degree of compliance with the environmental rules, international parameters and good engineer-

ing practices, in order to identify preventive and corrective measures needed to protect the environment.

Congruent with all other applicable laws, in order to protect the rights of private individuals and the confidentiality of the information, only those members of the public who demonstrate that they are or may be directly affected by the activities of an audited business have access to information generated in the audit process. Pursuant to Article 38 bis 1 of the LGEEPA, Semarnat "shall make the preventive and corrective programs derived from environmental audits, as well as the basic diagnostic from which they arise, available only to those who are or may be directly affected. In all cases, legal provisions relating to the confidentiality of industrial and commercial information must be observed."

There is no right of public access to information with respect to the authority's environmental enforcement actions (such as inspections, penalties and judicial proceedings) while such actions are pending. The LGEEPA establishes that the requested information shall be denied in the case of information on matters pending resolution that involve judicial proceedings or inspections and oversight. ⁷⁹ The purpose of this limitation is to facilitate the discovery of facts and the determination of liabilities, as well as to protect the honor and prestige of the citizens or business implicated in the process until the competent authority issues a final ruling.

Access policies

In order to further knowledge of environmental compliance and enforcement actions, the Profepa web page provides to the public information on the number of environmental audits performed each year since 1992, specifying which ones remain in progress and which have already been concluded.⁸⁰

Profepa is currently developing a Mexican Environmental Compliance Index System (Sistema de Índices de Cumplimiento de la Normatividad Ambiental en México), including an Environmental Compliance Index Manual and an Environmental Compliance Index Assessment Report, all of which may be consulted at the Profepa web page. The authority also has an Agenda of Priorities that may be found on the web page.

^{79.} LGEEPA Article 159 bis 4, paragraph II.

^{80. &}lt;http://www.profepa.gob.mx/>.

Profepa also issues reports on its activities, including its inspections, environmental audits, penalties imposed, and the number of complaints filed by the public. This information may be consulted in the Semiannual Report on the General Situation of Ecological Balance and Environmental Protection, in the Semanta annual reports, in the monthly activity reports issued by the Profepa state delegations, and on its web page.

Cost

At present, access to Profepa reports is generally not cost-prohibitive. Access via Internet is free.

7. POLLUTANT RELEASE AND TRANSFER REGISTRIES

This section describes the right and mechanisms to obtain information on the release, handling and final disposal of pollutants.

The pollutant release and transfer register (PRTR) is an annual instrument for the compilation, integration and dissemination of data on 178 pollutants discharged, released or transferred to the air, water and soil, listed by type of establishment, economic sector and geographical region.

The legal basis for the PRTR is found in the LGEEPA reforms of 31 December 2001, under which Article 109 bis provides:

The Secretariat, the States, the Federal District and the Municipalities must keep a release and transfer register for air, water, soil and subsoil pollutants, materials and wastes under their jurisdictions, as well as those substances determined by the corresponding authority. Registry information shall be composed of the data and documents contained in the environmental authorizations, certificates, reports, licenses, permits and concessions processed by the Secretariat or the competent authorities of the Government of the Federal District, the States or the Municipalities, as the case may be.

Individuals and entities responsible for pollution sources are required to provide the information, data and documents necessary to mount the registry. Registry information shall be composed of data organized by substance and by source, attaching the name and address of the establishments subject to registration.

Registered information shall be public and shall have the effect of a declaration. The Secretariat shall allow access to said information pursuant to this law and all other applicable legal provisions, and shall disseminate it in a proactive manner.

It should be noted that, while the imposition of this obligation on individuals and facilities responsible for pollution sources is a big step forward, a NOM or some regulation is still needed to establish the conditions and requirements for complying with the obligation.

Hazardous waste management requires knowledge of the facilities or activities that generate it; the volume and type of waste produced, transported, stored, recycled, treated or eliminated each year; detection of the places in national territory where this occurs; information on the companies involved in hazardous waste transportation, storage, treatment or final disposal; and information on spills and how they are handled to minimize or control risks. For this purpose, a notification system drawing on hazardous waste management manifests and reports was established under the authority of LGEEPA Article 151 and the Hazardous Waste Regulation.

Right to access

The Semarnat delegations are responsible for receiving the manifests from businesses in each state. In practice, they do not have the control capacity at the service counters to ensure that forms are properly filled out, nor to capture and analyze data in a timely manner in order to prepare and release interpretations. It should be noted that generation manifests for 1997 through 1999 were captured and analyzed for Aguascalientes, Coahuila, Guanajuato, Querétaro, San Luis Potosí and Durango, which enabled the identification of filing errors and the need for improved forms (the electronic filing of which has been sought to eliminate the need for data entry). Generation manifests for the Federal District and the State of Mexico have also been entered for 2000.

The problem in practice is that the generators do not regularly submit the semiannual reports required to be filed in addition to the manifests. The semiannual reports represent a major opportunity to improve the information system, as they contain more current data and allow for performance follow-up. It would be useful to distinguish between large and small generators, as it is estimated that less than 10 percent generate more than 90 percent of all hazardous waste. Drawing on this distinction, the compilation system would not become saturated and it would therefore be used more and be more useful.

The inventory required under Article 4, paragraph XI of the LGEEPA Hazardous Waste Regulation is prepared based on the manifests and reports mentioned above and sets forth Semarnat's jurisdiction to establish and update an information system on hazardous waste generation. This inventory of hazardous waste-generating establishments may be consulted at the INE web page.

The information contained in the system is considered environmental information pursuant to Article 159 bis 3 of the LGEEPA. Therefore all persons are entitled to request this information from Semannat.

In addition to the information contained in the statements and reports, the public has access to other information on businesses responsible for the handling and final disposal of hazardous waste, in the risk study and accident prevention programs for such activities.

The risk study must be submitted to Semarnat along with the EIA, and is therefore available for public consultation under the terms and during the periods described in the section on the EIA procedure.

For its part, the accident prevention program must be submitted for approval to various public authorities, including Semarnat and the Secretariats of the Interior, Energy, Economy, Health, and Labor and Social Welfare. These programs are included in the definition of environmental information held by the authority, and are thus subject to public consultation.

Access policy

Pursuant to the Program for the Minimization and Comprehensive Handling of Hazardous Industrial Hazardous Waste in Mexico for 1996-2000 (*Programa para la Minimización y el Manejo Integral de los Residuos Industriales Peligrosos en México*–PMMIRIP), environmental information is fundamental for the establishment of policy, objectives and priorities, and for the assessment of policy performance. The hazardous waste handling program for this six-year presidential administration has yet to be published, and thus the policy is based on the aforementioned program and other publications on the handling and minimization of hazardous waste, available at the INE web page.⁸¹

^{81. &}lt;a href="http://remexmar.ine.gob.mx/cenai/textoscompletos.htm">http://remexmar.ine.gob.mx/cenai/textoscompletos.htm>.

Ease of access

The INE web page features information relating to the handling of hazardous waste, with reference to the following topics:

- · Functions of the hazardous waste bureau;
- Definition and characterization of waste;
- Annual hazardous waste volume manifested by businesses registered as generators;
- Legal bases to support the creation of the hazardous waste handling infrastructure, including the NOMs that establish the requirements to be met by sites to be regarded as controlled landfills;
- Specifications for the design, construction and operation of controlled landfills:
- · Directory of service companies authorized to handle hazardous waste;
- INE procedures relating to hazardous waste handling;
- · The Hazardous Waste Tracking System (Sirrep), discussed below; and
- · Mexico's international commitments regarding hazardous waste.

In recent years, Mexico has developed the following hazardous waste information and tracking systems, with the purpose of capturing, storing and processing data needed to assess waste generation, movement and disposal:

Hazardous Waste Tracking System (Sistema de Rastreo de Residuos Peligrosos-Sirrep). This system is intended to generate information to assist in the control and tracking of transboundary movement of hazardous waste, as well as to identify the sound management of such waste and the respective businesses' compliance with the law. The system is composed of two parts, one for businesses and one for the authorities responsible for regulating the transboundary movement of hazardous waste.

National Hazardous Waste Inventory System (Sistema Nacional de Inventarios de Residuos Peligrosos). The Bureau of Hazardous Waste Statistics and Inventories, within the General Bureau of Integral Pollutant Management, working on consolidating this system so that all information recorded in the Semarnat state delegations automatically forms part of a Semarnat database. This database, expected to be ready

by the first half of 2002, will include information on the type of waste, volume, industrial activity, country to which the waste will be sent, etc., as well as statistics on hazardous waste handling.

Mexican Network for Environmental Handling of Hazardous Waste (Red Mexicana de Manejo Ambiental de Residuos Peligrosos-Remexmar). This network acts as a mechanism to promote the more effective management of waste throughout national territory, through the creation of Coordinating Technical Nuclei (Núcleos Técnicos Coordinadores-NTC) or Environmental Waste Management Networks (Redes de Manejo Ambiental de Residuos) in each state. The network includes a National Information Center (Centro Nacional de Información-Cenai), the purpose of which is to promote information on sound waste management. Various texts are available for consultation at Cenai on hazardous waste handling. It also has information modules, such as universities that are part of Remexmar, where private individuals may obtain information on waste handling and other related topics.

8. EXCEPTIONS TO THE RIGHT OF ACCESS TO ENVIRONMENTAL INFORMATION

As discussed in Section 1 of this chapter, the right of access to information is stipulated in Constitutional Article 6, although the Supreme Court, and not the Constitution itself, has defined the right as an individual guarantee.

In a recent decision, the Supreme Court held that:

[t]he right to information set forth in the last part of Article 6 of the Federal Constitution is not absolute, but rather, as any guarantee, is subject to limitations or exceptions based fundamentally on the protection of national security and respect for the interests of society and the rights of citizens. These limitations have given rise to the concept of information secrecy known in law as "reserved information" or "bureaucratic secrecy." In these conditions, as the State is required to be mindful of such interests as a passive subject of the guarantee, in observance of the constitutional and legal standards, the aforesaid right cannot be guaranteed indiscriminately, but rather respect for the exercise thereof includes exceptions which both regulate and guarantee it, in light of its subject matter. Thus, in the case of national security, there are rules that restrict access to information on that subject given that public knowledge may lead to harm to national interests, and that also penalize failure to observe that reservation. As regards the public interest, there are rules protecting criminal

investigations, health and public decency, and in the case of personal safety there are rules protecting citizens' rights to life or privacy.⁸²

In other words, the right of access to information is an individual guarantee for all citizens, and therefore must be guaranteed by the State. However, there are exceptions limiting this right in the case of national or public interest, as well as in respect of third-party rights. Following is a discussion of the exceptions to the right of access to environmental information.

The Federal Law of Transparency and Access to Public Governmental Information (see Section 1.4) classifies reserved and confidential information, including that considered as such by another law; that whose disclosure could compromise national security, public safety or national defense; information which disclosed could undermine international negotiations or that is provided on a confidential basis by other states or international organizations; which disclosed would harm the country's financial, economic or monetary stability, endanger the life, safety or health of any person or cause serious harm to law enforcement activities or judicial or administrative processes. It also includes criminal investigations; commercial, industrial, tax, banking or fiduciary secrecy; and the opinions, recommendations or viewpoints forming part of the deliberative process of public servants while the final ruling which must be documented, is pending. Confidential information includes personal data and information deemed confidential, reserved or reserved commercial information by the person providing the information to the subject of the law. Confidential information cannot be disclosed without the express consent of the owner thereof.

The Law imposes limits on the ban on disclosing reserved and confidential information. First, the Law stipulates that the reservation may not be invoked in the cases involving the investigation of serious violations of fundamental rights or crimes against humanity. Second, information may be declassified when the grounds for such classification cease to exist, or when the reservation period has passed; this period is 12 years and may be extended when it is proven that the causes for classification continue to exist. Third, the parties must be given access to those parts of the document that do not contain any reserved information. The Federal Public Access Institute (*Instituto Federal de Acceso a la Información Pública*), created pursuant to the Law, is responsible for establishing the criteria for classification and declassification of reserved information in

Ninth period. Instance: Full Court; source: Federal Judicial Weekly and Gazette; volume XI, April 2000, thesis: P. LX/2000; p. 74; subject: Constitutional, isolated theses.

accordance with the Regulation. The Law provides that the heads of administrative units shall be responsible for classifying information in accordance with the criteria set forth in the Law, Regulation and guidelines issued by the Institute.

The LGEEPA chapter on the right to environmental information specifically establishes the following circumstances in which Semarnat and the states, Federal District and municipalities must refuse to disclose the requested information:⁸³

- I.- Where the information is deemed confidential by law or when, due to the nature thereof, its disclosure affects national security;
- II.- Where the information relates to matters subject to pending judicial or inspection and enforcement proceedings;
- III.- Where information is provided by third parties, without there being a legal obligation to do so; or
- IV.- Where the information relates to inventories, inputs and process technologies, including descriptions thereof.

In addition, the EIS chapter of LGEEPA establishes the right of proponents of work or undertakings to reserve any information which if disclosed could affect industrial property rights or the confidentiality of the commercial information provided by the proponent.⁸⁴

Under LGEEPA's Environmental Impact Regulation, any EIS assessment file must be made available to the public unless the proponent, upon filing of its application, requests that the information be reserved because publication of the information would affect industrial property rights or the confidentiality of commercial data.⁸⁵

Under LGEEPA, Semarnat must provide preventive and corrective programs derived from environmental audits only to those that are or may be directly affected. The Law clearly specifies that there must be compliance with provisions regarding the confidentiality of industrial and commercial information. Therefore, where matters are deemed to be confidential or related to industrial information, they will be exempted from disclosure to affected parties.⁸⁶

^{83.} LGEEPA Article 159 bis 4.

^{84.} LGEEPA Article 34.

^{85.} LGEEPA Article 38.

^{86.} LGEEPA Article 38 bis 1.

There are limitations on the right of access to information in other laws that are closely linked with LGEEPA. These include the Federal Law of Administrative Procedure (LFPA),87 the Federal Law of Measurements and Standards (*Ley Federal sobre Metrología y Normalización*),88 the Law for the Promotion of Scientific and Technological Research (*Ley para el Fomento de la Investigación Científica y Tecnológica*),89 and the General Wildlife Law (LGVS).90 In principle, any person who considers that any of these exceptions is contrary to the nature of access to information may question its legality before the courts, arguing that such provision or law does not guarantee access to information as provided under Constitutional Article 6. However, the availability of a constitutional injunction (*amparo*) in cases regarding individual guarantees, such as this one–which still lack mechanisms to make them effective–is still a matter of debate.

On the other hand, where the authority violates rules on confidentiality or trade or intellectual secrets, the aggrieved party may file a lawsuit to claim moral or economic damages, as the case may be, and seek compensation. Industrial secrets include not only technical information but also commercial information with market value that gives a holder a

^{87.} LFPA Chapter V, referring to access to documentation and information, establishes the right of all interested persons in an administrative procedure to know the status of their proceeding, except when they contain information on national defense and security, they related to matters protected by commercial or industrial secrecy, where the interested party is not the named or affected person in the matter, or in the case that a legal provision so prohibits. The same Law mentions the RFTS: the public availability may be excluded by accord published in the DOF, in the case of information regarding specific proceedings undertaken exclusively by individuals when they do not relate to the establishment or performance of a business activity.

^{88.} In the case that the information in the development of advance drafts of NOMs is classified as confidential by the person providing it, it shall not be disclosed and shall enjoy the protection established in the intellectual property provisions (Article 50). Pursuant to Article 46, draft NOMs must be published in the DOF, and any information deemed confidential shall not be subject to comment.

^{89.} According to the Law, all technological research and development institutions that receive federal government support are required to publicly disclose their activities and the results of their research and development, notwithstanding the corresponding industrial or intellectual property rights and information that, due to the nature thereof, must be reserved. The same is provided for the National Science and Technology Council (Comisión Nacional de Ciencia y Tecnología), which must maintain and administer a publicly available integrated information system on scientific and technological research, except for information that may affect industrial and intellectual property rights and any established confidentiality rules (Article 6).

^{90.} In the National Wildlife Information Subsystem, established under the LGVS, Semarnat cannot make information publicly available when it risks generating intellectual property rights (LGVS Article 49).

competitive advantage.⁹¹ As provided in Article 82 of the Industrial Property Law, the business owners and industrialists may decide which information is to be kept confidential in order to obtain a competitive advantage vis-à-vis third parties. This provision is congruent with Articles 34 and 159 bis 4, paragraph III, of the LGEEPA. For this reason, industrial and trade secrets are, generally, the main reason for denying public access to information.

Article 159 bis 5 of the LGEEPA states that after 20 days have passed from the date on which the information request is received, if the environmental authority has not issued a response in writing, the request shall be deemed to have been denied (*deemed denial*). By using this article, the environmental authority can always deny access to information without the need to justify such action.

9. GENERAL CONSIDERATIONS

Mexico has been developing a legal and institutional system on matters related to the environment for nearly 30 years. The last 10 years have been particularly dynamic, during which time the legal and theoretical frameworks for the right of access to information and citizen participation in environmental matters have been developed. There are presently various initiatives underway to make these frameworks effective.

The LGEEPA establishes general rules regarding the right of access to environmental information covered by the Act. However, most sectoral environmental laws do not contain an access to information mechanism nor provisions requiring the competent authority to provide it. 92

In practice, the Internet web pages of the principal government environmental agencies offer information on the administrative areas responsible for facilitating public access to environmental information and access to procedures allowing for citizen participation in environmental decision-making processes. While the existence of environmental information is guaranteed, the same is not true of its quality or the format in which it must be provided.

^{91.} Injunction review 504/96. Federal Prosecutor under the Tenth District Criminal Court in the Federal District. 20 August 1996. Unanimous vote. Author: by authorization of the Federal Judiciary Council, Luis Montes de Oca Medina. Clerk: Ana Eugenia López Barrera.

^{92.} As stated above, there is a draft Access to Information Law.

As regards the dissemination of environmental information, Mexico has an Environmental and Natural Resources Information System, as provided in the LGEEPA, 93 that makes available a considerable amount of information and data. However, this collection of databases and Internet web pages lacks systematic and effective coordination. A network of environmental information services is currently being created.

The adoption of the Federal Law of Transparency and Access to Public Governmental Information is a major, recent development in the creation of a legal framework for public access to information held by the Mexican federal government. However, the creation of institutions and agencies to enforce the Law, as well as the organization of the files of government agencies, are pending tasks that will require substantial efforts by the "legal subjects." In addition, the federal executive branch (in issuing the Regulation), the heads of the administrative units, the Institute (in its guidelines and decisions) and the courts must still define in detail key concepts such as "reserved" or "confidential" information.

Lastly, with regard to public participation, although the law provides for instruments and mechanisms enabling public participation in decision-making processes, the timing thereof is too late to have any effective influence on the decision-making. Furthermore, the submission and inclusion of public observations and proposals is, in the end, at the environmental authority's discretion. In addition, instruments defining the scope and application of public participation processes are still unclear or even nonexistent. The authority and civil society are undertaking efforts to fill these gaps.

^{93.} Article 159 bis of the LGEEPA.

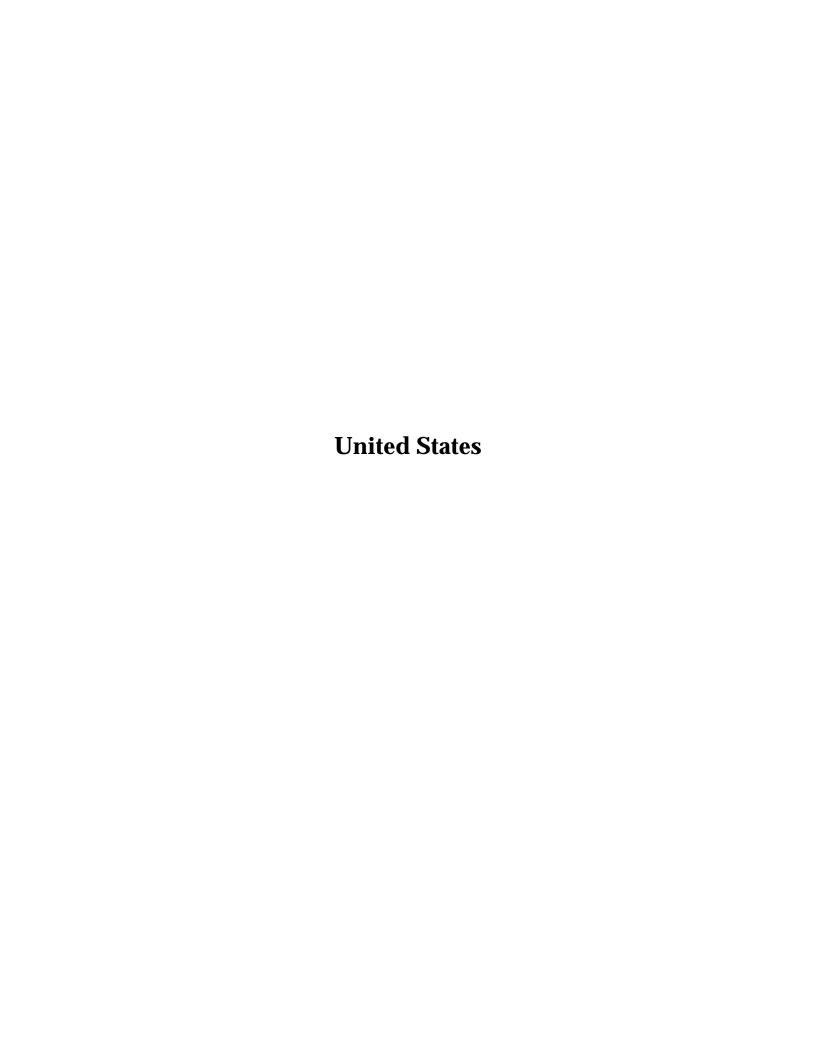


Table of Contents

1.			TTIONAL AND STATUTORY FRAMEWORK IC ACCESS TO INFORMATION
	1.1	Introd	luction
	1.2	Overv	view of Constitutional Provisions
	1.3		view of Federal Access Legislation, Policies, ractices
		1.3.1	Freedom of Information Act
		1.3.2	Congressional Collection and Dissemination of Information
		1.3.3	"Voluntary" Agency Dissemination of Information
		1.3.4	Judicial Branch
		1.3.5	"Government in the Sunshine"-Open Meeting Laws
	1.4		view of State Access Legislation, Policies, ractices
		1.4.1	The Ohio Public Records Act 150
		1.4.2	The Ohio Open Meetings Act

2.	ENV	/IRONMENTAL IMPACT ASSESSMENTS 153
	2.1	Federal Regulations and Policies
	2.2	Selected State Regulations and Policies
		2.2.1 California's Environmental Quality Act 157
3.	LICI	ENSES OR PERMITS FOR PROPOSED PROJECTS 157
	3.1	Federal Regulations and Policies
		3.1.1 Legal Right of Access
		3.1.2 Access Policies
	3.2	Selected State Regulations and Policies 162
		3.2.1 Tennessee
		3.2.2 New Jersey
4.		PLANS
	4.1	Introduction
	4.2	Federal Regulations and Policies
	4.3	Selected State Regulations and Policies 167
		4.3.1 California's Administrative Procedure Act 168
5.	TOX	CICS RELEASE INVENTORY
	5.1	Federal Regulations and Policies
	5.2	Selected State Regulations and Policies

		5.2.1	New Jersey's Worker and Community Right-to-Know Act			
6.	ENFORCEMENT AND COMPLIANCE ACTIONS 1					
	6.1	Feder	ral Regulations and Policies			
		6.1.1	Citizen Enforcement Suits			
		6.1.2	Information from the Regulated Community: Monitoring and Reporting Requirements 178			
		6.1.3	Accessing Information from the Government 180			
	6.2	Select	ted State Regulations and Policies			
		6.2.1	The New Jersey Water Pollution Law 182			
7.	EXCEPTIONS TO DISCLOSURE					
	7.1	Statut	tory Exemptions			
		7.1.1	General			
		7.1.2	Confidential Business Information 185			
		7.1.3	Risk Management Plans			
		7.1.4	Environmental Impact Assessment Exclusions 188			
	7.2	Disclo	osure after the 9/11 Terrorist Attacks			

1. CONSTITUTIONAL AND STATUTORY FRAMEWORK FOR PUBLIC ACCESS TO INFORMATION

1.1 Introduction

This chapter discusses law, policy and practice governing public access to government-held environmental information at the federal level in the United States and provides examples from the state level. The analysis covers environmental impact assessment (Section 2), proposed permits (Section 3), proposed regulations (Section 4), toxic release inventories (Section 5), compliance and enforcement actions (Section 6), and exceptions to disclosure (Section 7). Useful background information is provided in Section 1 by a review of key constitutional provisions and federal and state laws that are relevant to public access to environmental information in the United States. Given their prime importance, freedom of information laws at the federal and state level are discussed in some detail, as are certain general policies relating to access to information.

1.2 Overview of Constitutional Provisions

The United States Constitution establishes the framework for the functioning of the United States government. The Constitution divides the government into three branches–executive, legislative, and judicial–and enumerates the powers of each. The executive branch functions through a system of agencies whose operations are regulated by administrative law. The rules, regulations and general orders promulgated by an administrative agency, pursuant to its delegated powers, have the force and effect of law.

The First Amendment to the US Constitution states, "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances." This amendment has been interpreted as imposing limits on the government's ability to withhold certain types of information from the public. This includes information

that is produced or released in a forum that, by its nature or by express constitutional command, is open to the public and not wholly internal to government. The First Amendment itself does not create a system for providing information to the public nor does it create a threshold level of appropriate disclosure of information to the public.¹

In Article I, under the speech or debate clause, the Constitution prohibits the courts or the executive branch from punishing a legislator for making information public in the course of the legislative process. In addition, Article I provides that "Each House shall keep a Journal of its Proceedings, and from time to time publish the same, excepting such drafts as may in their judgment require secrecy...." Beyond these specific, narrow constitutional provisions, there is no generalized constitutional basis for public access to information (environmental or other), and public access in the United States remains a matter of legislative empowerment rather than constitutional mandate.

1.3 Overview of Federal Access Legislation, Policies, and Practices

US law provides a number of tools that allow public access to information related to the environment that is held by both governmental and private sources. The most basic and important mechanisms are freedom of information laws, right-to-know laws, permitting laws, and environmental impact assessment laws. Freedom of information laws and several supplementary tools for the public to obtain information will be outlined in some detail in this section, while the right-to-know laws, environmental impact assessment laws, permitting laws, and other information access mechanisms will be discussed in the following sections.

While the right of the public to access information is usually exercised pursuant to statutes and in accordance with regulations, many states recognize a common law right to inspect documents held by state and local authorities.² Where it is recognized, this right can apply to force disclosure of information that is exempt from disclosure under a state's freedom of information law.³

L.H. Tribe, American Constitutional Law, 2nd ed. (New York: The Foundation Press, 1988) at 814.

^{2.} See e.g., A.E. Bonfield and M. Asimov, State and Federal Administrative Law (St. Paul: West Group, 1989) at 537.

^{3.} See e.g., Irval Realty Inc. v. Board of Public Util. Comm'rs, 294 A.2d 425 (N.J. 1972).

1.3.1 Freedom of Information Act

In the United States, the public can gain access to federal executive agency records through the *Freedom of Information Act* ("FOIA"), 4 a general purpose law that applies to many kinds of governmental information. Under this law, any person can request an agency to provide copies of all documents it holds relevant to a particular subject. This system puts the burden on the public to reasonably describe the information requested and demand its disclosure, in accordance with the FOIA regulations of the relevant agenc(y/ies). FOIA applies only to agency records in the possession and control of the government.

Legal Right of Access

The FOIA works by establishing a presumption that any person may have access to any record held by a government agency unless the record is covered by a specific exemption in the Act.⁵ While the term "record" is defined at 5 U.S.C. §552 (f)(2), there has been substantial litigation over whether particular pieces of information requested from an agency are "agency records" subject to the Act. In general, agency records do not have to be paper documents. They can include photographs, maps, tape recordings, and information contained on computer disks, but not personal notes of agency employees. The FOIA also requires agencies to make final adjudicatory opinions, policy statements, and administrative staff manuals, among other things, available for public inspection and copying.

To gain access to an agency record, a person must make a request that "reasonably describes" the record desired. Most agencies require that FOIA requests be made in writing. Agencies must respond to FOIA requests within certain time limits. If an agency does not possess the record asked for in the letter, it may simply deny the FOIA request—it does not have to collect or develop new information. When an agency denies all or part of a FOIA request, it must specify the reasons for the denial in writing, and must inform the requestor of the right to appeal the denial administratively.

^{4. 5} U.S.C. §552.

^{5.} See e.g., US Department of Justice, On-Line Freedom of Information Act Guide (May 2000), online: <www.usdoj.gov/oip/foi-act.htm> (date accessed: 20 March 2002) and Reporters Committee for Freedom of the Press, How to Use the Federal FOI Act, 8th ed., online: http://www.rcfp.org/foiact/index.html> (date accessed: 29 April 2002).

Certain documents-including those dealing with national security, private personnel records, ongoing criminal investigations, or confidential business information—are exempt from disclosure under the FOIA. If the agency decides that a document contains information that falls within one of these exemptions, it can withhold from disclosure only those parts of the document that are subject to the exemption. Access to any reasonably segregable non-exempt portions of the document must be given to the person requesting the information. If the government withholds the requested documents, the person requesting the information can challenge this decision in court. Exceptions to disclosure are discussed in Section 7, below.

The courts play an important role in enforcing the requirements of the FOIA. Individuals, firms, or the press whose FOIA requests have been denied have the right to challenge the denial in court. In such a law-suit, the agency has the burden of showing either that an exemption applies to the request or that the agency does not have responsive records. This gives an advantage to the person making the request, and promotes the presumption in favor of disclosure. Case law has established the principle that the exemptions are to be narrowly construed to maximize disclosure of agency records. Judicial review also has helped clarify the scope of the exemptions to the FOIA and made their application more uniform from agency to agency.6

Access Policies

In October 1993, President Clinton issued a memorandum calling upon all federal agencies "to renew their commitment to the *Freedom of Information Act*, to its underlying principles of government openness, and to its sound administration.⁷" In a companion memorandum, Attorney General Janet Reno announced that "it shall be the policy of the Department of Justice to defend the assertion of a FOIA exemption only in those cases where the Agency reasonably foresees that disclosure would be harmful to an interest protected by that exemption. Where an item of information might technically or arguably fall within an exemption, it ought not to be withheld from a FOIA requester unless it need be.8"

^{6.} See *e.g.*, Bonfield and Asimov, *supra*, note 2 at 539-54 (discussing cases interpreting FOIA exemptions) and S.G. Breyer *et al.*, *Administrative Law and Regulatory Policy*, 2nd ed. (New York: Aspen Law and Business, 1998) at 731-37.

President's memorandum to department and agency heads regarding the Freedom of Information Act, 29 Weekly Comp. Pres. Doc. 1999 (11 October 1993).

Attorney General's memorandum to department and agency heads regarding the Freedom of Information Act, Daily Report for Executives (BNA) No. 191 at 145 (5 October 1993).

On 12 October 2001, Attorney General John Ashcroft issued a new Department of Justice policy memorandum superceding the earlier policy. The new policy encourages agencies to consider carefully the various institutional, commercial, and personal privacy reasons when determining whether to make a discretionary disclosure of exempt information, and provides that "the Department of Justice will defend your decisions unless they lack a sound legal basis...." The new policy therefore supports the assertion of a FOIA exemption if a sound legal basis exists for the assertion, even if the agency does not reasonably foresee that disclosure would be harmful.

Ease of Access

Environmental groups and journalists have used general access to information laws very effectively. However, inherent in the systems established for the purpose of implementing these laws are a few burdens and constraints that affect ease of access.

Even if the government does possess relevant information, the FOIA can be an awkward, expensive, and time-consuming means for disseminating government-held environmental information. Although the FOIA requires agencies to make certain categories of information automatically available to the public-much of it through the Internetaccess to most information is granted through case-by-case responses to specific requests. Often, the public is not aware of information that the government possesses and is not able to identify specific classes of records for disclosure. FOIA requests must reasonably describe the records requested, allowing them to be identified with a reasonable level of effort. If the agency's staff is not able to identify the government documents that would meet the request, the agency may request clarification from the requester, or deny the request if clarification is refused. Even if the public believes that the information exists, it can be time consuming for citizens or public interest groups to determine precisely what information they need, write a request that will identify this information specifically enough so that an agency employee can provide the information in a reasonable amount of time, and, if necessary, follow up on the request within the agency or in court, as was discussed above.

^{9.} Attorney General's memorandum for heads of all federal departments and agencies regarding the *Freedom of Information Act* (12 October 2001). While this new policy supercedes the previous Attorney General memorandum, it does not affect the presidential interpretation of the FOIA, and President Clinton's memorandum on the FOIA remains in effect. See online: Attorney General Ashcroft Memorandum http://www.usdoj.gov/04foia/011012.htm.

The *Paperwork Reduction Act*, amended in 1995, has the overall goal of having federal agencies become more responsible and publicly accountable for reducing the burden of federal paperwork on the public. Section 2, on the coordination of federal information policy, states that each agency shall "ensure that the public has timely and equitable access to the agency's public information...." This includes "encouraging a diversity of public and private sources for information" based on public governmental information; providing access to data maintained in electronic format; soliciting and considering public input on the agency's information dissemination activities; and providing notice when changing or terminating significant information dissemination products.

Under the FOIA, agencies must make categories of records-final opinions rendered in the adjudication of administrative cases, specific agency policy statements and administrative staff manuals that affect the public-routinely available for public inspection and copying. The *Electronic Freedom of Information Act Amendments of 1996* added to this category previously released records that the agency determines may be subject to subsequent requests. This means that, as of November 1997, agencies were required to maintain both conventional reading rooms and "electronic reading rooms" for documents created by the agency after November 1996, in order to meet their FOIA Subsection (a)(2) responsibilities. The amendments require agencies to make "reasonable efforts" to search in electronic form or format unless this would constitute significant interference with the agency's IT system.

Timeliness

The FOIA requires agencies to respond to an information request within twenty days. The agency is required to notify the requestor as to its decision to release or withhold the responsive documents within this time period. The agency will send the requestor a letter acknowledging receipt and stating an expected time when the requested information will be provided. The statute authorizes the agency to seek a ten-day extension if responding within the stipulated period is not possible. If an agency does not do so or if it denies the request, the person who made the request may appeal to the head of the agency, and if any information is still denied, may file suit within specified time limits (for most agencies, a six-year statute of limitations).

Public interest environmental groups, who often use FOIA requests to access specific environmental information, find that the government's actual response time varies greatly, depending on the department and the type of information requested. The public usually turns to

FOIA requests when informal requests have resulted in delays or when the material is needed without delay.

Affordability

The FOIA allows agencies to charge a fee for processing FOIA requests according to the fee schedule that the FOIA requires each agency to promulgate. Fees can be imposed to recover copying expenses, the cost of searching for documents and, in some instances, the cost of reviewing the request to determine whether any exemptions apply. The fee is not intended to recover the full cost of providing the information.

Under FOIA, different fees apply according to whom it is that requests the information. For example, a member of the news media or an educational institution may be charged only for reasonable copying charges, but a person requesting information for commercial use is also charged for reviewing the request and searching for the applicable records. The FOIA requires the fee be waived if disclosure of the information is in the public interest because it is likely to contribute significantly to public understanding of the operations or activities of the government and is not primarily in the commercial interest of the requester. Small requests are also often processed without a fee, in accordance with the applicable agency regulations.

The *Paperwork Reduction Act* explicitly holds that user fees charged by agencies for disseminating information may not exceed the actual cost of dissemination.

1.3.2 Congressional Collection and Dissemination of Information

Legislative committees in the US Congress have the authority to require federal agencies, including the United States Environmental Protection Agency ("EPA"), to provide documents and testimony on the implementation of environmental laws. Although this power is not limited, Congress exercises discretion to prevent disclosure of national security information and other sensitive matters.

In addition to making individual requests for information from executive agencies, Congress has created a special office of its own, the General Accounting Office ("GAO"), to provide systematic oversight of executive agency activities. The GAO reviews agency actions, evaluates how well the agencies have carried out the law, and reports to Congress

on those subjects. The GAO pursues its investigations at the request of congressional committees or individual legislators, by statutory directive, or on its own initiative. This systematic oversight often brings to light problems or opportunities for improvement in environmental regulatory programs and activities.

Of special relevance is the public nature of the GAO's reports. Even though the information requested by the GAO from the executive agencies may not be public, the final GAO report on any topic usually is a public document. Unless they include protected national security information, GAO reports become publicly available thirty days after they are presented to Congress. These reports not only provide the public with information, they also often save the public much time and expense because they present the information in a concise and organized fashion. The GAO will mail an index of their reports at no cost to any requester and will mail a copy of any report at no cost on request. 10

Finally, the information that Congress itself generates—its legislative bills, hearings, and debates—are generally available to the public. Much of the printed material is also available in electronic form via the Internet.¹¹ Debates in the two chambers are televised live (on cable television), as are selected committee proceedings. Limited public seating is available to view official committee meetings not involving national security secrets. Legislative committees must give advance public notice of their meetings.

1.3.3 "Voluntary" Agency Dissemination of Information

The FOIA is heavily used by citizens, public interest organizations, and regulated industries to obtain access to a wide range of information. There were approximately 15,000 FOIA requests to EPA in 2000. In practice, commercial interests are among the most significant requesters, as they often seek information on competitors or about agency processes. To respond to FOIA requests, EPA has 83 full-time FOIA personnel and many more with part-time or occasional FOIA duties (equivalent to 547 full-time personnel). To reduce the records management burden, as well as to comply with various specific legal directives for access to documents, many federal agencies post agency reports, studies, policies, and other selected documents on the Internet. These documents are also available in agency reading rooms where people may review and (for a nominal fee) copy them. For example, the Department of Energy main-

^{10.} Many of these reports are also available on the GAO web site: <www.gao.gov>.

^{11.} See e.g., http://thomas.loc.gov (the Library of Congress web site for Congress).

tains reading rooms with declassified environmental and safety documents at some of its nuclear weapons production sites. These give citizens a better sense of what records the agency has and faster access to them, and they reduce the clerical demands that FOIA requests would otherwise impose.

Most agencies create rulemaking dockets, with complete copies of public comments on proposed rules, available via some sort of reading room arrangement. Some agencies will open their offices to accommodate reasonable, informal citizen requests to view agency working files and documents. For example, the US Forest Service has the reputation of allowing broad access to agency data for citizens interested in the development of forest management plans. Other agencies, such as law enforcement or defense agencies, have the opposite reputation.

1.3.4 Judicial Branch

Almost all judicial action takes place in open proceedings that may be fully reported in the press. Many jurisdictions allow court proceedings to be televised. In addition, private citizens involved in civil court actions with the government or other private parties have the power to require opposing parties to produce information relevant to the case through the process of "discovery." Litigants may demand the production of documents, written responses to questions, the opportunity to question potential witnesses under oath, and other means of garnering information. Parties faced with discovery requests may ask the court to block such requests if they are not relevant to the trial or if they are otherwise not allowed under the Rules of Civil Procedure. This paper discusses discovery powers further in its explanation of citizen enforcement suits in Section 6.1.1, below.

1.3.5 "Government in the Sunshine"-Open Meeting Laws

The federal government and most state governments require almost any group of people exercising official decision-making authority to open their meetings to the public. 12 Thus, regulatory boards, commissions conducting specialized inquiries, or licensing boards must give public notice of their meetings in the *Federal Register* and allow the press and public to attend. In some cases, the open government principle may make it difficult for decision-makers to discuss business informally with

^{12.} A number of laws require this at the federal and state level and are known as "government-in-the-sunshine laws." See *e.g.*, 5 U.S.C. §552(b) prescribing when federal agencies must conduct open meetings.

one another outside of public meetings. The *Ohio Public Records Act* and *Open Meetings Act* (see Sections 1.4.1 and 1.4.2, below) are good examples of "government in the sunshine" laws at the state level.

Under the *Federal Advisory Committee Act* ("FACA"), even *ad hoc* committees of experts assembled to advise a federal agency on specific problems must announce their meetings and open them to the public.¹³ Also under the FACA, minutes and transcripts of the committee meeting must be made available for public inspection and copying at a single location in the offices of the advisory committee. In some instances, though, federal agencies avoid the requirements of the FACA by seeking advice from a series of independent experts, signing individual consulting contracts with each expert and by requiring each expert to submit an individual report. Since there is no official committee, the public disclosure requirements of the FACA do not apply.

1.4 Overview of State Access Legislation, Policies, and Practices

Records kept by state agencies are available to the public under state freedom of information laws. Most states have some combination of a freedom of information act, a community right-to-know act, an open meetings act, provisions in an administrative procedure act regulating permitting and rulemaking, and provisions in individual environmental laws which provide for access to information during permitting, enforcement, and other stages of the implementation process. Many states also have environmental impact assessment ("EIA") provisions, either in a state EIA act or provisions within a more general environmental law.¹⁴

1.4.1 The Ohio Public Records Act

Legal Right of Access

An example of a state general freedom of information act is Ohio's $Public\ Records\ Act$, which provides access to publicly held information. The law requires that all public offices maintain records properly and make them accessible to the public, with only certain exceptions. Exceptions to the Act include trial preparation records, confidential law enforcement investigatory records and medical records.

^{13.} Federal Advisory Committee Act, 5 U.S.C. Ap. 2, §1 et seq.

^{14.} See *e.g.*, online: Reporters Committee for Freedom of the Press <www.rcfp.org/tapping/index.cgi> (with links to all the state freedom of information laws).

^{15.} R.C. 149.43 and related sections of R.C. Chapter 149 (West 1999 and Supp. 2000).

Access Policies

The state legislature has provided in the *Public Records Act* that the public should have prompt access to public records. ¹⁶ At the same time, the Act allows state offices to adopt policies and procedures that limit the number of records that may be requested by a person from that office and sent by US mail to ten per month, unless the requesting person certifies that they are not for commercial purposes. The Act also has numerous exceptions.

Ease of Access

Under the Act, public officials must promptly prepare and make available for inspection all public records at reasonable times, during regular business hours. Where the public office keeps information in databases that require microfilm or computer access, the equipment necessary to reproduce the information must also be made accessible to the public. Upon request, a person responsible for public records shall make copies of public records available at cost and within a reasonable amount of time.

Timeliness

As mentioned above, copies must be made available within a "reasonable amount of time" and records must be "promptly prepared" and made available for inspection at "all reasonable times during regular business hours."

Affordability

A public office may adopt a reasonable policy setting a fee for copies. The fee should reflect the actual costs involved in making a copy. Public offices usually will not charge for copies where the requester is indigent or represents a non-profit group.

1.4.2 The Ohio Open Meetings Act

Legal Right of Access

The *Ohio Open Meetings Act* requires all state and local officials to take official actions and to conduct all deliberations upon official busi-

^{16.} R.C. 149.43(B).

ness only in open meetings unless the subject matter is specifically excepted by law. 17

Public bodies must promptly prepare minutes of all public meetings. The minutes do not have to detail discussion during executive sessions, but need reflect only their general subject matter. In terms of openness, all public bodies must take all official actions and hold all deliberations in meetings that are open to the public. Public bodies may only go into executive session during open meetings.

Access Policies

The state legislature has specified that the *Open Meetings Act* is to be liberally construed within the goal of promoting public access to information.

Ease of Access

Under the Act, public bodies must give notice that a meeting will be held and, in certain instances, must identify the purpose of the meeting. Public bodies must establish, by rule, a reasonable method by which the public can determine the time and place of regularly scheduled meetings. A "regular meeting" is one that is held at scheduled intervals. For special meetings, the purpose of the meeting must also be communicated to the public.

Timeliness

In Ohio, the appropriate state body must provide at least 24 hours advance notification of a particular meeting to all news media that have requested such notification. In addition, the public body's meeting rules must provide for reasonable advance notice of all meetings at which a specific type of business is to be discussed to all persons requesting such notice.

Affordability

A reasonable fee may be requested by the agency to provide advance notice of meetings where a specific type of business is to be discussed.

^{17.} R.C. 121.22.

2. ENVIRONMENTAL IMPACT ASSESSMENTS

Public access to information is an intrinsic part of the laws, policies, and practices associated with environmental impact assessments ("EIA"s). The federal regime under the *National Environmental Policy Act* ("NEPA") provides a legal guarantee of the public's right to know, ¹⁸ as do related state regimes.

2.1 Federal Regulations and Policies

Legal Right of Access

One of the key mechanisms in the United States for accessing information on anticipated environmental effects is found in the EIA policy established under NEPA. A federal agency must prepare an environmental impact statement ("EIS") for each major action that could significantly affect the quality of the human environment. This includes proposed construction projects as well as proposed legislation. The US Environmental Protection Agency ("EPA") is responsible for reviewing and evaluating all EISs. EISs typically include a detailed discussion of three essential subjects: (1) the proposed project and its alternatives; (2) the environmental impacts of each alternative; and (3) mitigation measures that can be taken to avoid or minimize unwanted impacts.

Under NEPA the public is accorded a legal right to access information concerning every step of the EIA preparation and decision-making process. The government is under an explicit duty to make information readily accessible to the public at specific points in the process.

In general, NEPA regulations require that the EIS, the comments received, and any underlying documents be made available to the public pursuant to FOIA.¹⁹ In the case of an action with effects of national concern, notice of the preparation and availability of draft EISs must be published in the *Federal Register* and mailed directly to interested parties. For federal actions with effects of local concern, such as the permitting of an individual plant, publication of notice in local periodicals is also required.

 ⁴² U.S.C. §4321 et seq.; see D.R. Mandelker, NEPA Law and Litigation, 2nd ed. (New York: Clark, Boardman and Callaghan, 1992, supp. 1997, 1998 and 2000) and N.C. Yost, NEPA Deskbook, 2nd ed. (Washington, DC: Environmental Law Institute, 1995).

^{19.} For regulations regarding implementation of NEPA, see 40 C.F.R. §§1500-1508.

As part of the NEPA process, federal agencies must hold or sponsor public hearings whenever appropriate and solicit appropriate comments from the public. Agencies must also explain in their procedures where interested parties can get information or status reports on environmental impacts and other aspects of the NEPA process. The US system puts great weight on this public disclosure and involvement, requiring that scoping meetings be preceded by a public notice of intent to initiate the EIS process. The agency must publicize the availability of the draft EIS; provide a copy to any person, organization or agency that requests one; and actively solicit comments on it from appropriate state and local environmental agencies, Indian tribes potentially affected, and the general public. The agency must also hold public meetings or hearings when there is substantial interest or controversy about the proposal, or when requested by another agency with jurisdiction over the action.

Under NEPA, federal agencies are required to prepare an EIS as part of recommendations or reports on proposals for legislation. These "legislative EISs" have been performed only rarely. In the few instances where they have, legislative EISs often follow an abbreviated process for environmental impact analysis that dispenses with many of the opportunities for public review common in project-specific EISs. For example, an agency recommending or reporting on legislative proposals often does not need to engage in public scoping or, except in specified circumstances, prepare a draft EIS for public comment. Still, in some cases, for example with Forest Service wilderness designation recommendations, the proposal is both legislative and administrative and the full process of preparing an EIS is followed.

Finally, Section 201 of NEPA formerly required the President to prepare and transmit to Congress an annual Environmental Quality Report.²⁰ The report included information on the state of the environment, trends in environmental quality and management, the adequacy of available natural resources, a review of governmental and civil society programs and activities that affect the environment, and a program for remedying the deficiencies of existing programs and activities. Approximately 25 reports were produced. However, the *Federal Reports Elimination and Sunset Act of 1995*²¹ eliminated this requirement, and the 1997 Environmental Quality Report, focusing on the topic of the World Wide Web, was the last one produced.²²

^{20. 42} U.S.C. 4341.

^{21.} Public Law 104-66.

 [&]quot;Environmental Quality-The World Wide Web," online: <ceq.eh.doe.gov/nepa/reports/1997/>.

Access Policies

Executive Order 11514 on the Protection and Enhancement of Environmental Quality was issued in 1970 and updated in 1978 to further the purposes of NEPA.²³ The Executive Order makes federal agencies responsible for developing procedures to ensure the fullest practicable provision of timely public information, understanding of federal plans and programs with environmental impacts, and to obtain the views of interested parties. Agency procedures must include public hearings and provide the public with relevant information, including information on alternative courses of action. Federal agencies are asked to encourage state and local agencies to adopt similar procedures for informing the public concerning their activities affecting the quality of the environment.

Ease of Access

In general, NEPA requires very broad disclosure but it also contains exceptions such as those found in the FOIA and in cases where information is unavailable or too costly to find.²⁴ Controversy frequently arises over agency interpretations of such terms as "significant impact" and questions about what levels of hazard and risk an agency must disclose. Agencies are not required to inform citizens about a project until after screening to determine the extent of potential environmental impacts. If after screening the agency decides not to prepare an EIS, it must prepare a Finding of No Significant Impact ("FONSI") and notify the affected public of its decision.²⁵

The scoping process under NEPA, wherein the scope of issues and environmental impacts to be considered in the EIS are determined, is also open to the public. This means that the public has access to background information that will be considered during scoping. The public also has access to all information that is developed during the entire EIS process and incorporated into the draft and final EIS, as well as all comments and underlying documents.

Agencies are required to circulate the entire draft and final EIS to any person or organization that requests it. As a practical matter, it is very easy for the public to access these documents. A letter, a phone call,

^{23. 3} C.F.R. §902 (1966-70); as amended by Executive Order 11991, 3 C.F.R. §123 (1978).

^{24. 40} C.F.R. §1506.6.

^{25.} See generally 40 C.F.R. §1501.

or a visit is enough. Agencies will often keep mailing lists of people who have shown past interest in agency projects and automatically send them a notice of availability of draft and final EISs. Agencies may automatically send copies of draft and final EISs to groups and individuals with a well-known interest in a project, such as local politicians, journalists, and NGOs.

Timeliness

If a governmental agency intends to prepare an EIS, it must publish a notice of intent as soon as practicable and, in any case, before beginning scoping. Prior to preparing any detailed EIS, the responsible federal official must consult with and obtain the comments of any federal agency that has jurisdiction by law or special expertise with regard to the environmental impact involved. Copies of such statements and the comments and views of the appropriate federal, state, and local agencies authorized to develop and enforce environmental standards are to be made available to the public.

Affordability

Under NEPA regulations, material requested by the public is to be made available by the agency at no charge, if possible, or at actual cost.

2.2 Selected State Regulations and Policies

Approximately one-third of the states in the United States have EIA requirements under state environmental law. Specifically, Arkansas, California, Connecticut, Florida, Hawaii, Indiana, Maryland, Massachusetts, Minnesota, Montana, New York, North Carolina, South Dakota, Virginia, Washington, and Wisconsin, as well as Puerto Rico and the District of Columbia all have state EIA requirements. ²⁶ Virtually all states have procedures for notifying the public of forthcoming meetings, among which are public hearings on proposed EIAs, even if not already specified by the EIA provisions of the law.

The *California Environmental Quality Act*, one of the most comprehensive state EIA laws, provides a good example of access to information concerning the EIA process at the state level.²⁷

D. P. Selmi and K.A. Manaster, State Environmental Law (St. Paul: West Group, 1999) at \$10

^{27.} Cal. Pub. Res. Code §§21000-21193 (West 1999 and Supp. 2000).

2.2.1 California's Environmental Quality Act

Legal Right of Access

The *California Environmental Quality Act* ("CEQA") was among the models used by the US in developing the provisions implementing NEPA. The Act requires that an environmental impact report ("EIR") be prepared balancing the pros and cons of any major project. In the case where a report is not required (i.e., where the potential environmental effects are not significant), the agency must prepare a negative declaration, except when the project is specifically exempted by law.

Ease of Access

The California EIA process gives the public two opportunities to receive information concerning a proposed EIR: first, when the goals are being set and second, during the process which determines the scope of the environmental review process. Once goals are drafted, several public hearings are usually held to present information and to provide opportunities for public comment. At the different stages of the process, the public has access to information on the proposed goals, alternatives, the draft EIR, the final EIR, and the final proposed action.

Timeliness

Notice of draft and final EIR and planning meetings must be made at least 10 days prior to the meeting, be posted in or near the affected area, and be published in a locally available newspaper at least 10 days before the meeting. The notice must contain full information about the location, time and agenda of the meeting and contain any rules to be followed at the meeting. Decisions may not be made at the meeting on matters for which notice was not provided.

3. LICENSES OR PERMITS FOR PROPOSED PROJECTS

Permits are issued to facilities under most of the major environmental statutes through federal programs and through state programs, including those that were delegated under the federal environmental statutes. In this section, public access to environmental information relating to the permitting process is discussed through examples of approaches taken under federal and state law.

3.1 Federal Regulations and Policies

An environmental permit is a legal document that specifies the conditions under which a regulated facility may operate, the types and amounts of pollutants it may discharge, and requirements as to reporting, record keeping, operation, maintenance, and all aspects of monitoring, including frequency, methodology, and sampling locations. In addition to providing specific limits on the pollution that a facility may discharge, a permit may specify a range of other requirements concerning the facility's operation, including the disclosure of important technical (and even financial) information about the facility and its operations and emissions.

Environmental agencies in the United States use permits to regulate a number of environmental problems, including air emissions, the discharge of water pollution, the operation of mines, and the treatment, storage, and disposal of hazardous wastes.²⁸ Rules for issuing, modifying, and revoking permits under media-specific programs include procedures for public participation and access to information.²⁹

The public can play a significant role in the environmental permitting process. In some ways, the public's involvement in permitting bears many similarities to its involvement in notice and comment rulemaking, discussed in the next section. Additionally, when an individual has legal standing to challenge a permit (e.g., because it could affect the person's use and enjoyment of a natural resource), such a challenge before a judicial or administrative body offers additional opportunities to obtain information, for example through discovery.

3.1.1 Legal Right of Access

Generally, public interest is greatest when a new facility seeks a permit. If, however, a community has experienced problems with a permitted facility, or new pollution control standards have become applicable, a facility's application for permit renewal also tends to generate public attention. In either case, there are opportunities for the public to submit comments or participate in public hearings prior to the decision to grant or deny a facility's application.

^{28.} For air emissions, see *Clean Air Act Amendments of 1990*, Title V, §§501-507. For the discharge of water pollution, see *Clean Water Act*, Subchapter IV, 33 U.S.C. §§1341-1345. For the operation of mines, see *Surface Mining Control and Reclamation Act*, Subchapter V, 30 U.S.C. §§1251-1279. For the treatment, storage, and disposal of hazardous wastes, see *Resource Recovery and Conservation Act*, 42 U.S.C. §§6925.

^{29.} See e.g., 40 C.F.R. Part 124.

159

When a government agency receives an application for a permit or a permit renewal, it first confirms that all necessary information has been provided. Once a federal agency has received a complete application, it may decide either to deny the application or to begin preparing a draft permit.³⁰ Depending on the type of the permit, the government may provide public notice and the opportunity for comment before the agency actually begins to draft the permit. This ensures that the permit writers review public comments before drafting the permit language. Frequently, notice is delayed until after a draft permit has been prepared to allow the public to focus its comments on actual provisions of the proposed permit.³¹

Notice of permitting must indicate all relevant details concerning each specific permit, such as the name and address of the facility, as well as the business and industrial processes that will be carried out there. It may also describe the nature, quantity, and frequency of the discharges from the facility, and any anticipated environmental effects from these discharges. Depending on the facility and pollutants involved, the notice may provide additional information to assist the public in evaluating the likely impact of the proposed activity. For example, if a facility is planning to release pollutants into surface waters, the notice must identify the location of all discharge points at the facility and the name of the receiving waters, and it may mention water quality standards applicable to the waters and whether the waters currently meet those standards. The notice must also state whether an EIA has been prepared.³²

3.1.2 Access Policies

EPA's 1981 Policy Statement on Public Participation³³ covers rulemaking (when regulations are classified as significant), the administration of permit programs, and program activities supported by EPA financial assistance to state and local governments. The purpose of the policy is to strengthen the EPA's commitment to public participation and establish uniform procedures for public participation in the EPA's decision-making process. The policy affirms the view that only through exchange of information between the EPA and the public can good environmental decisions be reached. Agency officials are expected to provide for, encourage, and assist public participation. The policy encourages officials to strive to communicate with, and listen to, all

^{30. 40} C.F.R. §124.6.

^{31.} See 40 C.F.R. §124.10(b) (applicable to state-delegated programs under the federal Clean Water Act, Resource Recovery and Conservation Act, and UIC).

^{32.} See 40 C.F.R. §124.10(d)(1).

^{33. 46} Fed. Reg. 5740 (19 January 1981).

sectors of the public. The policy assumes that agency employees will strive to do more than the minimum required, and is not intended to create barriers to more substantial or more significant participation. Because the policy recognizes the agency's need to set priorities for its use of resources, it emphasizes public participation in those decisions where options are available and alternatives must be weighed, or where substantial agreement is needed from the public if a program is to be carried out.

On the whole, the policy clearly sets out that public participation should begin early in the decision-making process and continue throughout as necessary. The agency is required to set forth options and alternatives beforehand, and seek the public's opinion on them. Merely conferring with the public after a decision is made does not achieve this purpose, according to the policy. The role of agency officials under the policy is to plan and conduct public participation activities that provide equal opportunities for all individuals and groups to be heard.

EPA is in the process of updating its *Policy Statement on Public Participation*. On 28 December 2000, EPA issued a *Draft 2000 Public Involvement Policy* that reflects the addition of statutes under EPA administration, technological changes (such as the advent of the Internet), and advances in public participation techniques.³⁴ In the public review process, most commentators found the 1981 Policy to be a good framework, but they proposed a number of specific mechanisms to improve its implementation, including providing notices and information in easy-to-understand, plain English; informing the public earlier; and increasing the use of the Internet to provide public access to information.³⁵ It is anticipated that the new policy will be finalized in spring 2002.

Ease of Access

Federal permitting regulations in the United States require federal agencies to maintain lists of all interested persons and organizations in a region, and to mail notices of the proposed permit to these people.³⁶ These interested parties might include local civic associations, local

Online: EPA < www.epa.gov/stakeholders/policy.htm> (date accessed: 7 November 2001).

EPA Public Participation Policy Review Group, Engaging the American People: A Review of EPA's Public Participation Policy and Regulations with Recommendations for Action, EPA 240-R-00-005 (Dec. 2000).

^{36. 40} C.F.R. §124.10(c)(1)(ix).

chapters of environmental organizations, trade union representatives, recreational associations, and other groups likely to be affected by the proposed activity. Mailings of this nature, combined with official government bulletins, notices in local newspapers and radio broadcasts, are used to alert interested members of the public of a pending permit application. The agency is required to notify all communities and political jurisdictions whose environment might be affected by a facility's operation, not just those situated in the immediate vicinity of the facility.

Because permit applications and draft permits are technical in nature, they may be difficult for non-experts to understand. Under US permitting laws, non-technical documents called "fact sheets" are often required.³⁷ The fact sheets give a brief description of the discharges from the facility, the proposed limitations on those discharges, and requirements for compliance and monitoring. They also include an explanation of the rationale used in developing the proposed discharge limitations. Fact sheets are required to be made available to the public, and are mailed to anyone who requests a copy. They provide, in less technical form, much of the information upon which interested citizens base their comments.

Notice of a proposed permit typically instructs members of the public about how they can participate in subsequent phases of the permitting process. The notice includes a description of the procedures for submitting comments on the permit, and the procedures for requesting a public meeting on the issue. The names and addresses of the agency personnel responsible for the permit are also provided, along with directions about how interested parties may obtain copies of the permit application, the fact sheet, and other relevant documents.

The use of other types of notice beyond official government notice is important in the context of permitting because of the significant impact a permitting decision can have on communities affected by a facility's operations. In addition, the use of supplemental forms of notice is feasible in the permitting context because the geographic scope of a permit is typically fairly small. Local newspapers and radio stations in the United States are likely to be a community's major source of information. Notice of a proposed permit will reach the greatest number of people in a community if it is published or broadcast through those media, and permitting laws require or encourage their use.³⁸

^{37.} E.g., 40 C.F.R. §124.8.

^{38. 40} C.F.R. §124.10(c)(2)-(4).

Timeliness

The agency usually must notify the public of its action as soon as possible, and preferably before a final decision is made.³⁹

Affordability

The actions discussed above, such as advertising the permit application and mailing fact sheets or copies of the application are taken at no or minimal cost to the public.

3.2 Selected State Regulations and Policies

Permitting is carried out at the state level, both under state programs to which authority for implementing the federal environmental statutes has been delegated, and also under state environmental statutes and state administrative procedure regulations. Permits issued under state programs that implement the federal environmental statutes come under the federal permitting requirements for public participation and access to information described above. For permits that do not fall under federal law, most states have some sort of notice requirement which vary in the detail and nature of the information provided, and which concern to whom notice must be provided and in what fashion. Permitting rules and practices in Tennessee and New Jersey are fairly typical examples of access to information during the permitting process at the state level. 40

3.2.1 Tennessee

Legal Right of Access

Environmental permits in Tennessee are generally issued under the federally delegated state environmental programs for air, water, and waste. Each division creates its own specific rules for involving the public in the permitting process. The public notice provides the name of the company applying for the permit, the type of operation, and the contact information for the governmental engineer assigned to prepare the permit. If the division receives a substantial number of comments, a public hearing will be scheduled.⁴¹

^{39. 40} C.F.R. §124.10.

^{40.} Some states, such as Texas, have relatively comprehensive procedures for permitting that includes, *inter alia*, the opportunity for adjudicatory hearings that allow for discovery of documents from the permit applicant as well as from the permitting agency. These hearings frequently make much more information publicly available than notice-and-comment hearings.

^{41.} E.g., Tenn. Code § 68-211-703 (permitting of proposed landfills).

Ease of Access

The notice is published in local newspapers, and both the notice and the draft permit are available for review at public depositories, which are usually local libraries around the state. There is no hotline or toll-free number provided for interested persons; to discuss the proposed permit with the engineer or to receive more information, any interested member of the public located outside the capital will have to make a long-distance call. If detailed information on the process is requested, this will only be available in Nashville. Any individual can call the engineer for more information and will usually be able to get limited information over the telephone. Private citizens are usually given more assistance than commercial consultants.

Timeliness

The comment period will be anywhere from $30\ \text{to}\ 45\ \text{days},$ depending on the division.

Affordability

The cost of the requested material depends on how much information is requested and who asks for it. If an entire file is requested, the individual will most likely be asked to come to the office in the Capitol or to the local library/depository to review it in person and make copies, with a price per page.

3.2.2 New Jersey

Legal Right of Access

The *New Jersey Water Pollution Control Act* is an example of a state environmental law with access to information requirements regarding the permitting process. ⁴² In general, any information obtained by the government pursuant to this Act must be available to the public, with the standard exemption for trade secrets. The Act explicitly provides for notice and opportunity for public hearings in the case of every proposed new permit, as well as for every proposed permit suspension, revocation or renewal, or any substantial modification of a permit. Notice of all modifications to a discharge permit must be published in the New Jersey Department of Environmental Protection *Bulletin*.

^{42.} N.J. Statutes Annotated, Title 58, Chapter 10A (West 1992 and Supp. 2001).

4. PROPOSED REGULATIONS, POLICIES, PROGRAMS, OR PLANS

4.1 Introduction

This section describes public access to environmental information about proposed regulations, policies, programs, or plans in the United States. It focuses on notice and comment rulemaking procedures under the federal *Administrative Procedure Act* ("APA"). Like the FOIA, these procedures apply beyond environmental rulemaking, but they have been useful to citizens who wish to have access to the governmental decision-making process in environmental matters.

The APA prohibits governmental agencies from making formal decisions that are "arbitrary and capricious.⁴³" Under this provision, the courts have required that agencies be able to justify their actions by producing a written "administrative record" of the documents that support their actions. The administrative record must be available for public scrutiny and for submission of relevant information by the public. In addition, it is open to FOIA requests and must be made available if the agency decision is challenged in court.

Sometimes a program for environmental regulation is so complex that industry and citizens require help understanding it. The government may establish information offices to respond to questions from the public about regulations. The EPA has set up several telephone "hotlines" that industry and the public can call without charge to ask questions about regulatory requirements, as well as to request information about governmental activities.⁴⁴ In addition, the EPA has a Small Business Ombudsman to answer questions from small businesses and to advocate the point of view of the small business community in agency proceedings.

4.2 Federal Regulations and Policies

Legal Right of Access

Notice and comment or legislative rulemaking is a particular method of developing legally binding administrative rules. Notice and comment rulemaking has become the most common method of enacting

^{43. 5} U.S.C. §706.

^{44.} See *e.g.*, online: <www.govinst.com/resourcecenter/resource/envirohotlines. html> (date accessed: 30 April 2002) (listing federal environmental hotlines).

rules in the United States. The APA, enacted in 1946, represents the first comprehensive codification of administrative procedure in the United States and governs, among other things, the process of notice and comment rulemaking applicable to federal agencies.⁴⁵ Notice and comment rulemaking requires the agency to notify the public of a proposed rule by publishing it in the *Federal Register* and to consider and respond to written comments submitted by the public before adopting a final rule.

Many of the notice and comment rulemaking requirements derive from judicial interpretations of the APA, and are not found in the words of the statute itself. In general, the law allows affected members of the public to challenge regulations in court and allows courts to overturn regulations if, among other issues, the agency fails to provide the public with proper notice and opportunity to comment on draft regulations or fails to consider significant public comments.⁴⁶

Access Policies

In 1993, President Clinton issued Executive Order 12866 regarding regulatory planning and review. The Executive Order describes, in part, a regulatory review process designed to be more open and accessible to public scrutiny. The President ordered his administration to make its regulatory review process more accountable and open to public examination. The Office of Information and Regulatory Affairs is in charge of implementing the Executive Order. The goals of this office are to increase public involvement in the rulemaking process by using informal means in addition to the more traditional formal means represented by the notice and comment process.

The Clinton Administration also encouraged "negotiated rulemaking" which involves interested parties directly in the rule drafting process, even before the notice period. By involving interested parties directly in drafting a rule, and by having them negotiate out some areas of disagreement, the Administration expects the rule will be more intelligently drafted and less contentious when proposed.⁴⁷ Section 6 of

^{45.} See 5 U.S.C. §706.

^{46.} See *supra*, note 6; see also R.J. Pierce and K.C. Davis, *Administrative Law Treatise*, 4th ed. (Boston: Little, Brown and Company, 2002).

^{47.} But see David D. Doniger, "Standing Committee Symposium on The Role of Private Institutions in Public Environmental Decisionmaking: Negotiated Rulemaking: D. Negotiated Rulemaking at EPA: The Examples of Wood Stove Emissions and Truck Engine Emissions", (1987) 17 E.L.R. 10251 (noting that a lack of resources by NGOs can limit the effectiveness of negotiated rulemaking) and Matthew Schuckman, "Making the Hard Choices: A Collaborative Governance Model for the Biodiversity Context", (2001) 79 Wash. U. L.Q. 343 at 354-57.

the Executive Order directs agencies to explore and use regulatory negotiation in order to develop rules more by consensus.

For other policies relevant to rulemaking, see the discussion of the EPA's *Policy Statement on Public Participation* in Section 3.1.2, above.

Ease of Access

Unless potentially interested parties are made aware of a proposed rule, they will be unable to express their views on it, and public participation in the rulemaking process will be effectively defeated. Publication of the proposed rule in the *Federal Register* is meant to reach a wide public audience.

Proposed rules of federal agencies are published daily in the *Federal Register*, the official government publication for this purpose. The *Federal Register* is reliable, timely, and accessible. It is available on the Internet,⁴⁸ and in print form in many public libraries and government offices, and it collects in a single place the government's entire rule-making agenda.

Unfortunately, the very breadth of the publication can make it large and unwieldy. In practice, few ordinary citizens actually read the *Federal Register*, and the publication is used primarily by lawyers and regulated firms having a special interest in particular cases.

Individuals not only have a right to know what the government is saying, they have a right to know what others are saying to the government. The APA bans one-sided discussions and provides for open dockets where any individual can examine the administrative record to see what other people have said (at least in writing) about the proposed rule. Agencies keep copies of comments received on proposed regulations in the open docket, available for inspection at agency offices or through the use of the FOIA. Agencies will often designate a contact person, whose name and phone number are then printed with the draft and final rule in the *Federal Register*, to field inquiries about the regulation. Comments on a proposed rule must, however, be submitted in writing during the declared comment period.

Even with publication requirements in the *Federal Register* and in local newspapers, large segments of the local population do not have

^{48.} See online: Government Printing Office <www.access.gpo.gov/su_docs/aces/aces140.html> (date accessed: 20 March 2002).

167

access to information concerning proposed regulations. For example, if a rule is going to affect a largely Central American population in New York, notice of the proposed rule in the New York Times (the main daily newspaper) will not be effective in informing the target population. The information would need to be in Spanish and disseminated through other means than the printed news media. When dealing with a largely Hispanic community, for example, the most effective way to give notice is through Spanish-language radio stations.

Timeliness

The APA does not give a specific time limit within which notice of a proposed rule must be published. However, because an agency cannot proceed to issue a final rule until an opportunity has been given for the public to comment, there is pressure for the agency to make the proposed rule available to the public as soon as possible. The agency is required to allow sufficient time to receive and consider public responses before it adopts the final version of a rule. In the United States, comment periods usually last at least 30 days.

Affordability

Under most agency rulemaking procedures, documents are made available to the public at minimum cost and the agency may waive or reduce the costs in the public interest.⁴⁹ Moreover, under the *Comprehensive Environmental Response, Compensation and Liability Act* ("CERCLA"), for example, EPA can award "technical assistance" grants to local community groups to allow them to receive expert advice that will help them understand, and comment on, proposed government decisions regarding a particular Superfund site (but not for participating in rulemaking).⁵⁰

In the context of the open meetings principle of the *Federal Advisory Committee Act* and other similar laws, funds can be made available by the government for travel expenses and reasonable *per diem* expenses of citizen organizations in order to facilitate their participation.

4.3 Selected State Regulations and Policies

Most states have some version of notice and comment or legislative rulemaking provisions, either in their administrative procedure acts or

^{49.} See e.g., Clean Air Act, 42 U.S.C. §7607(d)(4)(A).

Technical Assistance Grants to Groups at National Priorities List Sites, 54 Fed. Reg. 49848 (1 Dec. 1989). Provided for in 42 U.S.C. §9617(e), CERCLA §117(e).

directly in their environmental statutes. In general, these provisions do not differ greatly from the federal procedures outlined above. The *California Administrative Procedure Act* provides an example of access to information concerning proposed regulations at the state level.⁵¹

4.3.1 California's Administrative Procedure Act

Legal Right of Access

In California, every agency drafting a regulation must make the proposal, and an initial statement of reasons for proposing the regulation, available to the public upon request. Notice of the proposed regulation must be mailed to every person who has filed a request for notice of regulatory actions and may be mailed to any person whom the agency believes to be interested in the proposed action. Notice of the proposed regulation must also be published in the California Regulatory Notice Register. Individual statutes can prescribe more stringent notice rules. In addition to the full text of the proposed regulation, notice must include the time, place, and nature of proceedings for adopting the proposed regulation, the date by which comments are due, the name and telephone number of the agency officer to whom inquiries concerning the proposed administrative action may be directed, as well as information concerning related laws and regulations. The agency officer in charge of the proposed regulation must also make available to the public upon request the location of public records, including reports, documentation, and other materials related to the proposed action. The agency must notify the public of changes to the proposed action at least 15 days before the agency adopts the resulting regulation. Also, state agencies may not add material to the record of the rulemaking proceeding after the close of the public hearing or comment period, unless adequate provision is made for public comment on that matter.

Access Policies

The general policy for access to information concerning proposed regulations in California is to encourage the widest possible notice distribution to interested persons.

Ease of Access

The California APA has a requirement that proposed regulations be written in "plain English," meaning language that can be interpreted

^{51.} California Administrative Procedure Act, Government Code §11340 et seq. (West 1992 and Supp. 2001).

by a person who has no more than an eighth grade level of proficiency in English. If it is not possible to use plain English due to the technical nature of the regulation, the agency is required to prepare a non-controlling plain English summary of the regulation.

Every agency must maintain a file of each rulemaking, including copies of petitions received from interested persons, all published notices, the determination, all studies and supporting documentation, and the minutes of any public hearing. The file must also contain an index or table of contents that identifies each item contained in the rulemaking file and must be available to the public.

Timeliness

The agency must give notice of the proposed regulation at least 45 days prior to the close of the public comment period on the proposed regulation. At the time of the close of the public comment period, a public hearing will typically be scheduled.

Affordability

The California Office of Administrative Law must make the *Regulatory Notice Register* available to the public at a nominal cost only.

5. TOXICS RELEASE INVENTORY

5.1 Federal Regulations and Policies

Legal Right of Access

The Emergency Planning and Community Right-to-Know Act ("EPCRA") is aimed at informing local governments, emergency response authorities, and the general public about environmental emergencies, as well as potential threats from ongoing releases of pollution into the environment. The EPCRA calls for the creation of state and local emergency preparedness bodies to plan for and receive notice of accidental releases of hazardous substances.⁵² Any facility that possesses listed substances in excess of the threshold amounts must notify the local emergency planning body of their existence and give immediate notice of any accidental releases. Although Congress designated an initial list of substances, the EPA can add substances to or subtract them from the

^{52.} EPCRA §§301-304, 42 U.S.C. §11001-11004.

list, and can set the threshold amounts for all listed substances. On request of the state or local emergency planning bodies, facilities may be required to submit more detailed information on the storage and use of each individual substance they possess.

Section 313 of the EPCRA requires the EPA to prepare a Toxics Release Inventory ("TRI") of more than 650 listed toxic chemicals released into the environment by manufacturing operations of a certain size. Facilities covered under Section 313 must make annual reports to the EPA. Many of the listed chemicals are not regulated by the EPA under any other program but nonetheless must be reported. In addition to release amounts, the TRI requires detailed substance-specific information on amounts emitted into the air from fugitive, non-point, and point sources; discharged to a stream or to a public wastewater sewage system; and released as hazardous waste to underground injection, off-site treatment facilities (e.g., recycling or incineration), and disposal (i.e., landfills or surface impoundments).

Companies required to report under the TRI must submit an annual report to the EPA, indicating which listed chemicals they use, in what quantities, how their waste streams are treated, and how much of each chemical is released into the environment, by medium (e.g., air, water, soil). Each year, the EPA releases a summary of the TRI information reported by the covered companies, including detailed analyses and facility-specific breakdowns of the TRI data. This report is also made publicly available. 53

Section 313 of the EPCRA is a very strong public disclosure provision, in part because it requires strict substantiation of claims that information should not be disclosed on the basis that it is confidential business information or contains trade secrets.⁵⁴ The EPCRA also provides heavy penalties for, and citizen suit opportunities against, facilities that do not comply with TRI requirements. State and local governments also can impose broader information disclosure requirements than those found in the federal law, provided confidential information remains protected. The EPCRA creates an exception to trade secret protection in that it guarantees health care professionals access to chemical information if needed for treatment or prevention of injuries. In non-emergency cases, however, the health care professional must agree to protect trade secrets before gaining access to the information.

^{53.} See *e.g.*, online: EPA <www.epa.gov/triexplorer/>.

US Environmental Protection Agency, "Environmental Protection Agency Pollution Prevention Strategy," 56 Fed. Reg. 7849 (26 February 1991).

The EPCRA presents several challenges worth noting. First, because it imposes an affirmative obligation on a large and constantly changing group of companies to come forward with information, the law can be difficult to enforce. How does the government or citizen enforcer identify the small company that mis-reports or should be reporting but is not? How do they find the company that under-reports its discharges? Finally, the important improvements in accessibility achieved by the EPCRA, Section 313, are limited by the scope of the inventory, which exempts or excludes important emissions information, especially from non-manufacturing facilities and for small quantities of extremely hazardous substances.

A further challenge is presented by the general lack of public awareness of TRI data availability, even in areas with high levels of chemical emissions. The EPCRA does not require the EPA to implement a public outreach program, and the lack of an EPA strategy for assessing the informational needs of different sectors of the public hampers the goal of ensuring public access to TRI data. Nevertheless, TRI is well-known and frequently relied upon by communities and environmental advocacy groups around the United States, and the media frequently reports the release of new TRI reports.

Access Policies

Government policies regarding public access to information made available through the EPCRA are further developed in the EPA's *Pollution Prevention Strategy*, published in 1991.⁵⁵ Under this strategy, the EPA has set a series of pollution prevention goals for its work with the regulated community. For example, in the *Pollution Prevention Strategy*, the EPA acknowledges the need for "more and better" information on the environmental performance of both consumer products and industrial facilities. Accordingly, the EPA has been using the EPCRA reporting requirements in order to implement these principles in its programs.

Ease of Access

The public can obtain copies of the information made available under the EPCRA from the local emergency planning committee, which must publish annual notices of availability.

The EPCRA directs the EPA to maintain TRI data on a computer accessible database. The EPA's TRI Reporting System is accessible to

^{55.} Ibid.

anyone with access to the Internet who has applied for and received a user identification code through the National Library of Medicine. With this code, any individual can access the database through the Internet. By accessing the database, a citizen can quickly obtain a report on which companies are discharging what chemicals in what quantities to what media in any part of the country. Citizens without telephone access can purchase computer-readable copies of the inventory, and those without computers can ask the EPA to search the inventory for particular information. In addition, the TRI database is available on microfiche or CD-ROM format at over 4,000 locations around the country–many of them public libraries–where people can go to use the database free of charge. A toll-free hotline also exists to answer questions from the public about the TRI system, conduct searches, and explain other aspects of the EPCRA.

The EPA makes the raw TRI data publicly available, and some NGOs have processed the information to make it more publicly accessible and understandable. For example, Environmental Defense's "Scorecard" is an Internet site (www.scorecard.org) at which citizens can identify facilities and the TRI releases in their neighborhoods and learn about ambient environmental quality and health risks at the same time. Such NGO sites complement governmental Internet dissemination of TRI data through TRI Explorer (www.epa.gov/triexplorer/), Envirofacts (www.epa.gov/enviro/html/ef_overview.html), and the National Library of Medicine (NLM) TOXNET System (toxnet.nlm. nih.gov/).

Timeliness

The requirement to make information publicly available through telecommunications directly from the EPA-maintained computer database gives the public access to new data as soon as EPA has updated the computer collection. The companies report their releases on a calendar year basis, within six months of the end of the calendar year. It usually takes some months for EPA to review all the submitted information and enter it into the TRI database. For example, EPA released the 1999 data (reported by July 2000) in April 2001.

Affordability

As mentioned above, the availability of information from the TRI through computer modem, on CD-ROM, in public libraries, through hotlines and information requests makes it possible for almost any citi-

zen to access the database at little or no charge. The statute specifies that the information is available on a cost-reimbursable basis.

5.2 Selected State Regulations and Policies

Approximately half of the states in the United States have right-to-know ("RTK") laws which complement the general freedom-of-information laws common to most states. ⁵⁶ Under these RTK laws, information disclosed is often derived from environmental surveys of the facilities conducted by the government. These surveys generally identify the conditions at the facility and chemicals that may be dangerous to community residents if released into the environment. The information from these surveys is made available to the public. Such surveys may be conducted as a result of a statutory requirement or a public request for information. Generally, trade secrets, privileged, or confidential information is not disclosed, although most RTK laws contain exceptions for medical emergencies, requiring disclosure of chemical information if it is needed by a physician to treat or diagnose an individual exposed to the substance. The *New Jersey Worker and Community Right to Know Act* provides a good example of a state right-to-know law. ⁵⁷

5.2.1 New Jersey's Worker and Community Right-to-Know Act

Legal Right of Access

The New Jersey Worker and Community Right-to-Know Act allows state and local officials and individuals to find answers to many questions about complex pollution problems. Facilities using hazardous chemicals must submit annual inventory reports about the presence and movements of toxic substances to the EPA, the New Jersey Department of Environmental Protection, and the state's local emergency planning committee. All inventory information is available to the public. Each year, every facility covered by the law must conduct an environmental survey of all the chemicals and conditions at the facility that may be dangerous to community residents if released into the environment. These surveys are detailed reports about the amounts, hazards, and locations of specific substances at the facility. The New Jersey Department of Environmental Protection has developed a list of hazardous substances covered by the law.

^{56.} The following states have right-to-know laws: California, Connecticut, Delaware, Florida, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Massachusetts, Minnesota, Missouri, New Jersey, New Mexico, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, West Virginia and Wisconsin.

^{57.} N.J. Stat. Ann. §§34:5A-1 to 34:5A-31 (West 2000 and Supp. 2001).

If a citizen challenges a facility's claim that certain information falls within a statutory exception to disclosure, the New Jersey Department of the Environment will ask the facility to show it why the information should be shielded from public disclosure. If the facility does not give a sufficient or proper reason, the New Jersey Department of the Environment may disclose the information to the person who requested it. In very limited circumstances, such as a medical emergency, the New Jersey Department of the Environment will disclose this information to health professionals who need access to the information to deal with the emergency. In almost all cases, the law requires that these health professionals enter into an agreement not to disclose the confidential information.

Ease of Access

Facilities must submit their surveys to the local police department, local fire department, local emergency planning committee, a designated county agency and the New Jersey Bureau of Hazardous Substances Information. The law requires the New Jersey Department of Environmental Protection to establish a central file for all the surveys they receive.

The public may obtain right-to-know information from several sources in New Jersey. One source is the New Jersey Department of the Environment. Information is obtained simply by sending a written request to their Bureau of Hazardous Substance Information. By clearly specifying the type of information requested, requests will be expedited. At the very least, requesters should identify the name and location of the facility about which they are requesting information. Another source of information is the county-lead agency, which is a designated agency in each county, usually the county health department, funded under the *Worker and Community Right to Know Act*. Each county-lead agency has a Right-to-Know Coordinator who responds to requests for information and assists facilities in complying with the law.

Timeliness

The New Jersey Department of the Environment will respond to a citizen's request for information within 30 days.

Affordability

The New Jersey Department of the Environment will not charge if the information requested is less than 50 pages of material. If the request is larger than 50 pages, there is a charge of ten cents per page.

6. ENFORCEMENT AND COMPLIANCE ACTIONS

While the US common law doctrine of prosecutorial discretion denies citizens a voice in agency decisions on whether and when to use governmental enforcement power,58 Congress has granted citizens their own enforcement rights in the form of citizen suit provisions that can now be found in most of the major environmental statutes. These provisions supplement agencies' enforcement capabilities and give citizens a role in the enforcement process. For citizen suits to be practical, members of the public must have access to accurate information about the compliance status of regulated entities. In fact, some federal statutes and implementing regulations provide that in federal environmental programs that are delegated to the states, a state must allow citizens to intervene in enforcement proceedings if the state does not already provide for citizen suits under state law.59

Access to information is the primary means by which the federal government allows citizens to participate in governmental decisions to enforce environmental laws. By accessing information, citizens are able to determine whether an environmental law, regulation, or permit has been violated, whether the government has taken actions to prosecute the violation, and what form of action citizens should take to enforce or promote compliance with the law.

Accurate information requires that the data be collected and provided to the government by regulated facilities and that the government provide the data to members of the public on request. Because the regulated community is so large, one way to increase the effectiveness of government efforts to gather environmental compliance data is to have the regulated parties monitor and report on their own discharges. In this approach, regulated entities must submit regular, detailed reports of monitoring results to federal and state agencies and must keep records of their monitoring results. Because the monitoring reports of regulated entities generally are sworn statements, reports that show violations are usually enough to prove liability in enforcement suits, either by the government or by private individuals. Significant civil and criminal penalties (for individuals, as well as the regulated entity) for fraudulent

^{58.} See *Heckler v. Chaney*, 470 US 821 at 830-31 (1985) (holding that an agency's decision not to prosecute or enforce is generally committed to an agency's absolute discretion).

E.g., 33 U.S.C. §1251(e) (Clean Water Act); 40 C.F.R. §123.27(d) (CWA implementing regulations); 30 C.F.R. §732.15(b)(10) (implementing regulations for the Surface Mining and Reclamation Act); see generally M.D. Axline, Environmental Citizen Suits (Salem: Butterworths, 1991) § 4.02(A).

reporting encourage accurate reporting, even if permit violations are thereby reported. Most US environmental statutes contain monitoring, inspection, record keeping, and reporting requirements. The EPA collects this information and maintains a computer database that also includes enforcement information.

Aside from certain exceptions, enforcement information is also accessible for private individuals and allows them to monitor the compliance status of regulated facilities and enforcement actions of the government. Under the FOIA and various state open records laws, members of the public also have a right to examine reports of regulated entities and government inspectors; and the *Emergency Planning and Community Right-to-Know Act* requires regulated entities to collect and issue reports about their discharges, which can then be used to document violations.

6.1 Federal Regulations and Policies

6.1.1 Citizen Enforcement Suits

In the United States, most environmental statutes contain citizen suit provisions enabling citizens to prosecute violators of statutory requirements. Citizen suit provisions have been used to enforce federal regulations in diverse areas ranging from antitrust to consumer protection. Citizen suit provisions are said to create private attorneys general, for they confer upon individuals the right to enforce public laws against other entities, either public or private.

The US *Clean Air Act* ("CAA"), enacted in 1970, was the first federal environmental statute of the modern era with a citizen suit provision. ⁶⁰ The CAA citizen suit provision is the basis for similar clauses in almost every other major piece of federal environmental legislation. Today, any person with standing can bring a lawsuit against private parties or the government for violations of certain sections of statutes regulating air, water, toxic waste, endangered species, mining, noise, the outer continental shelf, and more. Under many statutes, the remedies available to the citizen are equivalent to the civil remedies granted to the federal agency charged with administering the statute, including the recovery of attorney fees.

The typical citizen suit provision permits "any person" (including an individual, organization, or corporation) to sue any other person

^{60. 42} U.S.C. §7604(a), CAA §304(a) (citizen suit judicial enforcement).

(including the United States) who is violating the requirements of a statute, including the terms of a permit. The citizen can use information gained through discovery, or through FOIA requests, such as discharge monitoring reports. Discharge monitoring reports are often accepted by courts as definitive proof of a violation, because they are written and filed by the alleged violator. The right-to-know statutes and the TRI have also helped citizens identify and prove environmental violations.

Before filing a suit, a citizen must notify state and federal agencies as well as the alleged violator of his or her intentions. As long as the violation continues past the time of the notice and the state or federal government is not pursuing a "diligent enforcement" action against the alleged violator in court, a lawsuit may be filed by the citizen after 60 days. 61 Once the suit is filed, the government has no power to dismiss it and may affect the outcome only by intervening in the case. If the citizen wins, the court may order the defendant to stop the violating activities. In certain circumstances, the court may award the plaintiff the court costs and attorney fees associated with bringing the action. Some statutes allow the plaintiff to ask the court to impose civil penalties on the violator, payable to the US Treasury.

Many citizen suits are resolved by negotiated settlements rather than by trials. Courts have the authority to approve settlements which they find to be reasonable, adequate, and in the public interest. To ensure that settlements are effective in causing defendants to comply with the law, most citizen suit plaintiffs insist that settlements be as easy to enforce as possible. Many settlements are "consent decrees" which, on approval of the court, become enforceable as court orders. When the government is party to a lawsuit, environmental laws sometimes require notice to the public of proposed settlements and opportunities for public comment.⁶² The public notice requirements do not apply to citizen suit settlements.

^{61.} See R.V. Percival et al., Environmental Regulation: Law, Science, and Policy (Boston: Little, Brown and Co., 1992) at 995-96; B.S. Neumann and J.A. Knight, "When Are Clean Water Act Citizen Suits Precluded by Government Enforcement Actions?", (2000) 30 E.L.R. 1011; and Public Interest Research Group of New Jersey, Inc. v. Hercules, Inc., 50 F.3d 1239 (3d Cir. 1995) (holding that a Clean Water Act citizen suit 60-day notice letter was sufficient, since the act does not require the plaintiff to identify every detail of a violation, but simply enough information to enable the recipient to identify the specific violation).

^{62.} See RCRA, 42 U.S.C. §6973(d) (when the United States seeks to settle certain claims it must provide "notice and an opportunity for a public meeting in the affected area, and a reasonable opportunity for comment..."); see also 40 C.F.R. §271.16(d)(2)(iii) (1994) (states generally must provide at least 30 days for public comment on all proposed settlements of RCRA civil enforcement actions).

6.1.2 Information from the Regulated Community: Monitoring and Reporting Requirements

Legal Right of Access

Successful enforcement of pollution standards requires, among other things, available evidence of whether a source is complying with the set standards. Experience in the United States suggests that selfmonitoring and disclosure requirements are powerful enforcement tools.

Almost every US pollution control law requires regulated facilities to monitor their pollution discharges regularly and to keep records of their monitoring data and other information relating to their polluting activities. ⁶³ These laws require that the records either be provided periodically to the government or be available for inspection by the government on demand. In most cases, the laws provide for public access to any such records in the government's possession, so long as the records do not reveal trade secrets or other confidential business information. Even if the law lacks explicit public access language, government-held records, including those generated by private individuals, still may be available to the public through the FOIA, as discussed above. Usually, the government or the facility bears the burden of proving that the data should not be available to the public.

In the United States, self-monitoring and record keeping laws are indispensable to governmental enforcement programs because the government does not have the resources to monitor all regulated facilities itself. In addition, these laws can serve an important function in citizen enforcement. Public access to such compliance records allows citizens to identify regulated facilities that are violating the law. With this information, citizens can notify the governmental enforcement officials and encourage them to take enforcement action. Citizens can also publicize the violations, using public pressure to compel the facility to correct its violations.

In the United States, the *Clean Water Act* is generally considered to be the model for the use of self-monitoring.⁶⁴ This Act outlaws all dis-

^{63.} Examples of US environmental laws with monitoring and record keeping requirements include the Clean Air Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Surface Mining Control and Reclamation Act, Toxic Substances Control Act, the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund), and the Clean Water Act.

^{64.} The *Clean Water Act*, 42 U.S.C. §1318, states that any records, reports, or information obtained under this section shall be available to the public, with an exception for trade secrets.

charges of pollutants into surface waters without a permit from the federal or state government. The permits contain clearly stated discharge limits and other conditions, and either the government or citizen plaintiffs can go to court to enforce the permits. Under the *Clean Water Act*, the public is guaranteed access to the information collected by the government.

Ease of Access

Under the *Clean Water Act*, the government can specify what sort of monitoring, sampling, and record keeping a permit holder must undertake. The *Clean Water Act* guarantees public access to any permit and to any records, reports, or information that the government obtains from a permit holder, except for trade secrets. Coupled with the Act's citizen suit provisions, these access provisions allow citizens to seek relatively quick relief against violators. A citizen need only obtain copies of the polluter's permit and discharge monitoring reports ("DMR"s) to see if the discharges have exceeded the amounts allowed by the permit. If violations have occurred, the DMRs can be used as evidence against the polluter in court.

To ensure that the monitoring reports are accurate, the government not only has access to a permit holder's records, but also has broad inspection powers. These powers include the right to enter a permit holder's private property without advance notice, to inspect monitoring equipment and facility operations, and to take samples of effluents. This authority, combined with stiff criminal, civil, and administrative penalties for violation of monitoring and reporting requirements, encourages thorough and accurate record keeping by permit holders.

Timeliness

By EPA regulation, *Clean Water Act* permit holders must file monthly DMRs with the government, as well as notices of noncompliance if the monitoring indicates a violation.

Noncompliance serious enough to threaten health or the environment must be reported to the government within twenty-four hours.

^{65. 42} U.S.C. §1342(i), CWA §402(i).

6.1.3 Accessing Information from the Government

Most environmental statutes contain requirements for public access to information concerning enforcement and compliance. For example, under the *Clean Water Act*, before issuing an order assessing a civil penalty, the EPA "shall provide public notice of and reasonable opportunity to comment on the proposed issuance" of the order.⁶⁶ Any person who comments on a proposed penalty assessment must also be given notice of any hearing held and of the final order assessing the penalty.

Enforcement-related environmental information is kept by the EPA in a series of databases. These databases are divided into enforcement sensitive and non-sensitive sections. Enforcement sensitive data are those records that the agency is currently using in order to maintain an enforcement action against a specific facility. At the moment, the easiest way for an individual to access these databases is through the nongovernmental organization OMB-Watch (Office of Management and Budget-Watch), which has access to all of these databases and uses this access to assist citizens who are in need of information. OMB-Watch is a non-profit organization that monitors federal agencies in the United States. It maintains a computer access system to information held by the EPA. The public must register with OMB-Watch to receive a user identification number and a manual, which are sent within one week. Access is free if the public calls OMB-Watch directly or it can be gained through Internet <www.ombwatch.org>.

In addition to the TRI discussed above in Section 5, other examples of the EPA's various databases relevant to finding environmental compliance and enforcement information are the following: The Facility Index System ("FINDS") provides information on the location of facilities regulated by the EPA. This information is updated by the various EPA program offices and is available to the public through the governmental agency National Technical Information Service ("NTIS"). The NTIS can provide a member of the public with an EPA mainframe user identification number. The FINDS system is located on the mainframe and there is no charge to obtain this access number. The NTIS can also provide the data contained in FINDS on magnetic tapes for which is charged an at-cost fee. Other than the NTIS, the public can obtain access to FINDS by writing a FOIA request specifying the subject matter of interest in FINDS.

^{66. 42} U.S.C. §1319(g)(4) on rights of interested persons.

The Aerometric Information Retrieval System ("AIRS") contains enforcement information on all facilities that are permitted under the *Clean Air Act*. The data on air quality and pollution emissions is collected from state and local agencies. The information on AIRS includes a facility's name, address, a quarterly report on the facility's current compliance status, and a listing of enforcement actions taken at the facility both by the state and by the EPA. The report for each facility also tallies the number of violation notices issued and administrative actions taken at the facility for the past two years. In order to obtain access to AIRS, one must apply for a user identification number through the NTIS. Once a user number is obtained, an account is set up and on-line access to the database is available through the EPA mainframe. There is a US \$15 fixed monthly fee in addition to a charge for actual computer time. FOIA requests can also be used to access the information in the AIRS database.

The Resource Conservation and Recovery Information System ("RCRIS") is a national program management and inventory system of RCRA hazardous waste handlers. Handlers are characterized as fitting one or more of the following categories: treatment, storage and disposal facilities ("TSDF"s); large quantity generators ("LQG"s); small quantity generators ("SQG"s); and transporters. The RCRIS captures identification and location data for all handlers and a wide range of information on TSDFs regarding permit or closure status, compliance with federal and state regulations, and cleanup activities. Although there are no means for direct access to this database by the general public, various forms of the RCRIS are available in its non-sensitive format. These can be obtained through FOIA requests that generate RCRIS reports in print. The first US \$25 of copies are free, after which there is a charge of 15 cents per page. The RCRIS can also be accessed through the NTIS, which provides data type in the form of magnetic tapes with non-sensitive information through an annual subscription of US \$1,700. Certain limited versions of the RCRIS are also accessible through the Internet by using GOFER, FTP, or the World Wide Web. The charge for this access is the subscription fee charged by whichever channel is used.

The Comprehensive Environmental Response, Compensation, and Liability Information System ("CERCLIS") contains information on abandoned or uncontrolled hazardous waste sites. In addition, the database contains information on pre-remedial actions such as the discovery date and the completion date of a preliminary assessment, site inspection, and the date of final hazardous ranking determination. Of the sites, over 1,200 are listed on the National Priority List ("NPL"). CERCLIS also contains information such as a description of the NPL site, owner/generator information, regulatory and response history, waste description,

environmental impact information, water-use information, and the remedial events occurring at the NPL sites. Data is collected concerning the inventories, assessments, and cleanup of uncontrolled hazardous waste sites. EPA headquarters and regional offices maintain the data in CERCLIS databases. This information is only available in a non-sensitive format by informal request or through a FOIA request.

6.2 Selected State Regulations and Policies

In the United States, the EPA has primary responsibility for implementing programs under most US environmental statutes and must report to Congress on its successes and failures. Most environmental statutes, however, allow the EPA to delegate primary regulatory responsibility to the states, although the EPA remains ultimately accountable to Congress. States, therefore, take the lead in most direct compliance and enforcement activities and also take on specific responsibilities for providing the EPA with the information necessary to oversee and evaluate state activities and national program implementation. The information provided by the states to the EPA under the oversight requirements is available to the public on request under the federal FOIA and under a state's open records laws and policies. States typically provide reports on general enforcement and compliance records that include information on inspections, permit reviews, violations, and judicial cases filed. Reports are required anywhere from quarterly to yearly. In addition, many state environmental statutes contain specific provisions concerning public access to information during enforcement proceedings. The New Jersey Water Pollution Law provides a good example of a state law containing provisions for access to information concerning environmental enforcement.

6.2.1 The New Jersey Water Pollution Law

Legal Right of Access

Under the *New Jersey Water Pollution Law*, the government must provide an opportunity to the public to comment on a proposed administrative consent order prior to its final adoption if it would establish interim enforcement limits that relax effluent limitations established in a permit or a prior administrative order.

Ease of Access

The notice must include a summary statement describing the nature of the violation necessitating the administrative consent order and its terms or conditions. It must also specify how more information on the administrative consent order may be obtained and to whom written comments may be submitted. Before any final action is taken, the agency must notify everyone who submitted written comments and include a response to those comments.

Timeliness

The comment period may not be less than 30 days after the date of publication of the notice.

7. EXCEPTIONS TO DISCLOSURE

While the United States has an advanced legal and institutional system for making many types of information publicly available, access is primarily a matter of statute. The United States does not recognize a constitutional or human right of access to information. Consequently, there are few practical limitations on how narrowly Congress can constrain public access to information. As discussed above, most US laws, regulations, and policies governing access to information contemplate broad access. Typical exceptions cover confidential business information and information relating to an agency's deliberative process. Since the terrorist attacks of 11 September 2001, however, there has been a significant rethinking of public access to information the disclosure of which could reasonably be expected to cause great harm if improperly used by a terrorist. These legal and practical exceptions to access are now considered.

7.1 Statutory Exemptions

7.1.1 General

Most environmental and general statutes providing for public access to information provide explicit or implicit exemptions. For example, the FOIA specifically exempts from disclosure nine categories of information:

- national defense or foreign policy information (the information must be properly classified pursuant to criteria published by an Executive Order);
- information that is "solely related to" an agency's internal personnel rules and practices;

- 3) information that is specifically exempted from disclosure by a statute (other than subsection 552(b) of the FOIA) that leaves no discretion to the agency on whether to disclose the information or establishes criteria for nondisclosure;
- trade secrets and confidential business information (including financial information):
- 5) agency memoranda that would not be discoverable in litigation;
- personnel and medical files, the "disclosure of which would constitute a clearly unwarranted invasion of personal privacy";
- certain information regarding ongoing law enforcement investigations or prosecutions;
- specific information relating to (or contained in) reports on financial institutions;
- 9) and geological and geophysical information concerning wells.⁶⁷

The agency denying a FOIA request has the burden of proof to show that one of these exemptions applies.

Exceptions to disclosure under state freedom of information laws are usually similar, although most states provide for broader access with fewer exceptions. For example, only about one-third of state open records laws provide an exemption comparable to FOIA Exemption 5, and many of those state provisions are narrower than the FOIA exemption. The *Ohio Public Records Act* exempts intellectual property records, personal privacy records (including medical, adoption, DNA, and putative father records), probation and parole proceeding records, trial preparation records, and confidential law enforcement investigatory records.

When a FOIA request is made for information that includes exempt information, the agency must–if it can–provide "any reasonably segregable portion of a record" once the agency has deleted the exempt portions.⁷⁰

^{67. 5} U.S.C. §552(b).

^{68.} Bonfield and Asimov, supra, note 2 at 545.

^{69.} R.C. 149.43(A)(1).

^{70. 5} U.S.C. §552(b).

In the vast majority of cases where EPA has a document available, the agency has provided the requested information. Of the 14,837 FOIA requests that EPA processed in FY2000, EPA satisfied the full request in 10,718 cases, granted 628 partial requests, denied 77 requests, and did not provide the documents in 3,954 other cases. The most common reasons for exempting documents were to protect confidential business information (381 times), privileged inter-agency/intra-agency memoranda (288 times), and law enforcement files (280 times); all other exemptions were invoked a cumulative total of 115 times. In other cases of nondisclosure, EPA did not have the documents for 2,160 of the requests, referred the request to other agencies in 658 cases, or found the request duplicative of other requests in 254 cases. In 856 cases the request was withdrawn.

Courts have played a vital role in determining the precise scope of FOIA exemptions. For example, even with the national security exemption, which accords substantial discretion to the Executive Branch in classifying documents, courts can conduct *in camera* reviews of purportedly exempt documents to determine whether the exemption applies.

7.1.2 Confidential Business Information

Through permitting, monitoring, and enforcement activities, government agencies acquire significant quantities of technical and financial information relating to internal and facility operations. Businesses are sometimes concerned that releasing certain aspects of the information that they are required to submit would be revealing trade secrets. Moreover, if competitors are able to determine the precise emissions from a facility, they might be able to perform reverse engineering to determine the specific industrial processes (usually a trade secret, if not patented) that they use. In fact, many FOIA requestors are actually businesses seeking to obtain information on their competitors. Government agencies may also be concerned that releasing business information may impede their ability to obtain information voluntarily from the regulated community. At the same time, citizens need to know what chemicals are being released into the air, water, and soil around them to determine what environmental and health threats they face.

The often highly complex and technical nature of the information that is claimed as confidential business information ("CBI") or trade secret information often makes it difficult to determine whether the information in fact constitutes CBI or trade secret information and has

EPA, 2000 Annual Freedom of Information Report, online: EPA <www.epa.gov/foia/newrpt4.htm>.

generated costly and time-consuming litigation over whether such information is properly withheld. Government employees can be held criminally liable if they improperly disclose CBI, which may act as an incentive to err on the side of withholding information from the public. At the same time, government employees can be disciplined for "arbitrarily and capriciously" withholding information.⁷²

Here has been much litigation over the propriety of an agency's withholding CBI or trade secret information, as well as over agency attempts to disclose business information that the agency believes is not exempt. The US Supreme Court has ruled that FOIA is essentially a disclosure law and only allows the government to disclose CBI if it has the statutory authority to do so.⁷³ A lower court subsequently held that the scopes of the *Trade Secrets Act* and FOIA Exemption 4 are congruent. Thus, if there is no law or regulation specifically permitting disclosure of information that is exempt from release under FOIA Exemption 4, the government agency cannot disclose it.⁷⁴ Courts often allow actions styled "reverse-FOIA" actions, which by way of the APA allow private parties to assert FOIA protections to force the government to withhold information it would otherwise release.

In determining whether the government is justified in withholding information as "confidential" business information, courts have adopted an objective standard so that information that is required to be submitted is confidential only when disclosure would harm the ability of the government to collect information in the future, or when disclosure is likely to cause substantial harm to the competitive position of a third party, or where release would harm agency interests in compliance or program effectiveness. To Courts have noted that disclosure would harm the ability of the government to collect information where the information was submitted voluntarily, and would in some cases diminish the quality of the information where the submission was compelled by law. Information submitted voluntarily may also be withheld if it is of a type that is not "customarily" disclosed to the public by the submitter.

Businesses can protect specific chemical identities by claiming them as trade secrets on TRI disclosure forms under the EPCRA. However, submitters who would invoke this exemption must satisfy strict

^{72. 5} U.S.C. §552(4)(F).

^{73.} Chrysler Corp. v. Brown, 441 US 281 (1979).

^{74.} CNA Financial Corp. v. Donovan, 830 F.2d 1132 (DC Cir. 1987) (upholding disclosure of employee records that would not cause competitive injury to the submitter).

^{75.} National Parks and Conservation Ass'n v. Morton, 498 F.2d 765 (DC Cir. 1974).

^{76.} Critical Mass Energy Project v. NRC, 975 F.2d 871 (DC Cir. 1992) (on the bench).

substantiation requirements, including proof at the time a claim is submitted, that the information really is secret, that there is provable competitive harm which would result from disclosure, and that the substance in question is one which a competitor could readily reverse-engineer. The amanufacturer is exempted from disclosing the identity of a substance, he or she must nonetheless report his or her own identity, the general physical and chemical character of the substance, and the amount released. One exception to this trade secret protection guarantees that health care professionals have access to chemical information if needed for treatment or prevention of injuries. In non-emergency cases, however, the health care professional must agree to protect trade secrets before gaining access to the information.

As noted in Section 5.1, above, TRI does not require reporting of the releases of all pollutants from all facilities. Information reported (and available) under the TRI is limited to the chemicals that are specifically listed in the regulations (not all chemicals released to the environment) in excess of specified thresholds by specific sectoral facilities.

7.1.3 Risk Management Plans

The Clean Air Act⁷⁸ required facilities to develop and make publicly available Risk Management Plans ("RMP"s) that include an assessment of the hazards posed by dangerous chemicals at the facility, a program to prevent harm from occurring, and an emergency response plan. Perhaps the most controversial aspect of RMPs is the section on Offsite Consequence Analysis ("OCA"), which describes the potential impacts on the nearby community and environment of a worst-case scenario accident. In 1999, when RMPs were about to be posted on the Internet, chemical manufacturers and the FBI became concerned that making such information so publicly available could increase the risks of a terrorist attack. Congress passed a law directing the President to study the risks and the benefits of public access to OCA information and then promulgate regulations governing dissemination of that information.⁷⁹ The law and its

^{77.} To be entitled to confidential treatment, such trade secret claims must be sufficient-competitive harm being one of many regulatory criteria-and valid (i.e., information submitted to support the claim is true). The submission and review procedures are set forth in 40 C.F.R. Part 350. A submitter may also make trade secret and/or CBI claims on information submitted to substantiate a trade secret claim on specific chemical identity. Disclosure/protection of substantiation materials is governed by 40 C.F.R. Part 2 Subpart B.

 ⁴² U.S.C. §7412(r). See 40 C.F.R. 1400 and online: http://www.epa.gov/fedrgstr/EPA-AIR/2000/August/Day-04/a19785.htm>.

Chemical Safety Information, Site Security and Fuels Regulatory Relief Act, Public Law 106-40. See 40 C.F.R. 1400 and online: http://www.epa.gov/fedrgstr/EPA-AIR/2000/August/Day-04/a19785.htm>.

proposed implementing regulations allow members of the public to review some OCAs at designated public reading rooms, but they are not allowed to copy them.

7.1.4 Environmental Impact Assessment Exclusions

Not all federal projects need to go through the environmental assessment/environmental impact statement process. Some agencies have categorical exclusions from NEPA for "actions which do not individually or cumulatively have a significant effect on the human environment.80"

7.2 Disclosure after the 9/11 Terrorist Attacks

Following the terrorist attacks of 11 September 2001, the United States has undertaken a wide review of steps that may prevent and mitigate future attacks. Information disclosure has been a focus of debate, as government agencies, industrial facilities, and public interest advocates have sought to define which information should be made publicly available, to whom, and under what circumstances.

For example, one concern is that terrorists could use the Internet to review and conduct a preliminary assessment of which industrial facilities to target. So, all information relating to worst-case scenarios (already barred from the Internet by Congress–see Section 7.1.3, above) should not be available. Moreover, information on a facility's emissions (which could help to identify quantities of hazardous chemicals on-site, and thus a rough proxy for the potential impacts of a catastrophic attack) should be barred. Industry representatives have proposed legislative changes to FOIA and EPCRA to limit public access to information on chemical facilities, electricity generation data, municipal water sources, and emissions data.⁸¹

Proponents of public access counter that facility information (including location) is readily available in telephone books and most on-line directories, and most facilities tout information on quantities of their products (which could be used to identify large facilities) to attract

^{30. 40} C.F.R. 1508.4.

^{81. &}quot;Industry, Water Officials Eye Rollback of Freedom of Information Act", *Inside EPA* (5 October 2001) 1 at 18; "Utilities Press White House to Limit Public Access to Electricity Generation Data", *Inside EPA* (24 October 2001); Meredith Preston, "Chemical Industry Urges Restriction on Access to Worst-case Scenario Data", (BNA) Daily Environment Reporter (9 October 2001) at A-2.

private investors. They propose that safer, alternative chemicals should be used and that public review is even more critical now.⁸² To most NGOs, the legislative and administrative proposals seek to control embarrassing information more than address terrorist threats.⁸³

While the legislative debate continues, many federal and some state agencies have removed publicly available information from the Internet and are reviewing which information to make publicly available.84 For example, the Nuclear Regulatory Commission closed its website, the avenue through which it disseminates virtually all of its information. EPA has removed RMPs (which had been posted without the OCA) from its website, the US Geological Survey has removed a number of reports on water resources, the Department of Energy completely removed its site for the National Transportation of Radioactive Materials, and the Department of Transportation has removed its pipeline mapping information. Other federal agencies that removed web pages, reports, and other information include the Federal Energy Regulatory Commission, Los Alamos National Laboratories (reports), the Agency for Toxic Substances and Disease Registry (report on chemical site security), the Federal Aviation Administration (enforcement actions), the National Imagery and Mapping Agency, Bureau of Transportation Statistics (GIS information), Internal Revenue Service, International Nuclear Safety Center, and the Department of Energy (many reports and web pages, some of which have been reposted). States such as New Jersey, Pennsylvania, and Florida have also removed information from their web pages. Finally, as discussed in Section 1.3.1, above, the Attorney General has informed agencies that the Justice Department will defend assertions of FOIA exemptions unless they lack a sound legal basis, even absent the previously required demonstration of reasonably foreseeable harm to an interest protected by a FOIA exemption.

Some of these actions are already being challenged in courts. For example, the American Bar Association has sued the administration

^{82.} E.g., J.V. Grimaldi and G. Gugliotta, "Chemical Plants are Feared as Targets: Views Differ on Ways to Avert Catastrophe", Washington Post (16 December 2001) at A1; "Attacks May Prompt More Stringent Environmental Assessments", Inside EPA (12 October 2001) at 4; Jim Morris, "Calls Grow Louder for Phaseout of Chlorine: Potential as Terrorist Threat Cited; Defenders Say Chemical Essential", Dallas Morning News (20 November 2001).

E.g., "Hill, Activists Fear Bush Using Security Issue to Limit Data, EPA Rules", Inside EPA (Superfund Report) (29 October 2001) at 34.

^{84.} For a survey of information that is no longer publicly accessible, see "The Post September 11 Environment: Access to Government Information," online: OMB Watch < www.ombwatch.org/info/2001/access.html> (date accessed: 30 November 2001).

over its plan to monitor attorney-client discussions of people who are in the custody of the Immigration and Naturalization Service but not US citizens.⁸⁵ It is likely that the ultimate resolution of these issues will take years of legislative and judicial action.

^{85.} Molly McDonough, "ABA to Challenge Monitoring Rule: Association President: Anti-Terrorism Measure Goes Too Far", *ABA Journal e-Report* (30 November 2001), online: <www.abanet.org/journal/ereport/n29ash.html> (date accessed: 3 December 2001).

The Precautionary Principle in North American and International Law

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INTRODUCTION

Article 10(6) of the North American Agreement on Environmental Cooperation mandates the Council of the CEC to cooperate with the NAFTA Free Trade Commission in order to achieve the environmental goals and objectives of NAFTA. The CEC Council and the Secretariat's Environment, Economy and Trade program invested considerable time and effort developing the process by which the Council would undertake its work mandated under Article 10(6). This issue of *North American Environmental Law and Policy* contains the first two research papers commissioned by the Council as part of its work under Article 10(6). The papers themselves focus on different aspects of the use of precaution in North America.

The first paper, by Kal Raustiala, acting professor at the UCLA Law School, examines precautionary terminology in the federal statutes of the three NAFTA Parties: Canada, Mexico, and the United States. After describing several examples of precautionary language from the domestic federal statutes of each party, Professor Raustiala analyzes the commonalities and differences between the terminology employed. The second paper, by David Wirth, professor of law at Boston College, examines the role of regulatory philosophy in precautionary decision-making in United States law and policy, by: identifying international authorities articulating the need for precaution; analyzing variations in those formulations and evaluating their significance; and considering precaution as it might be understood from the perspective of the role of science in the regulatory process. Professor Wirth then scrutinizes precautionary theories as interpreted in the United States. He assesses federal legislation, presents case studies involving the application of federal statutory mandates, and evaluates judicial opinions interpreting federal law.

The CEC believes that these papers will be of great use to members of the public, policy makers and legal practitioners.

Precaution in the Federal Legislation of the NAFTA Parties

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Table of Contents

I.	IN'	TRODUCTION
	A.	The Concept of Precaution in Regulatory Law 199
	B.	Scope and Organization of Paper
II.		AMPLES OF PRECAUTION IN CANADIAN DERAL LEGISLATION
	A.	Plant Protection Act
	B.	Hazardous Products Act
	C.	Health of Animals Act
	D.	Canadian Environmental Protection Act 203
	E.	Feeds Act
	F.	Pest Control Products Act
	G.	The Oceans Act
III.		AMPLES OF PRECAUTION IN UNITED STATES DERAL LEGISLATION
	A.	Toxic Substances Control Act
	B.	Sustainable Fisheries Act
	C.	1977 Clean Air Act Amendments 207
	D.	Federal Food, Drug, and Cosmetic Act 208
	E.	National Environmental Policy Act 209

	F.	Endangered Species Act
	G.	Surface Mining Control and Reclamation Act 21
	H.	Clean Water Act
IV.		AMPLES OF PRECAUTION IN MEXICAN FEDERAL ATUTES
	A.	Ley General del Equilibrio Ecológico y la Protección al Ambiente (LGEEPA–General Law of Ecological Equilibrium and Environmental Protection) 21
	В.	Ley Federal sobre Metrología y Normalización (Federal Law on Metrology and Standardization) 21
	C.	Ley General de Salud (General Health Law) 21
	D.	Ley Federal de Sanidad Animal (Federal Animal Health Law)
	E.	Ley Forestal (Forestry Law)
	F.	Ley de Aguas Nacionales (National Water Law) 21
V.	AN	NALYSIS
	A.	Requiring pre-market approval or registration of products
	В.	Permitting regulation when harm is possible but not certain
	C.	Reference to the international precautionary principle 21
	D.	Requiring affirmative proof of safety to permit use/marketing
1 /T	CC	ANICH LICIONI 91

I. INTRODUCTION

A. The Concept of Precaution in Regulatory Law

Risk and uncertainty are central concepts in many areas of law, in particular health, safety, and environmental regulation. Regulatory statutes frequently aim at reducing risks, and sometimes attempt to eliminate risks. These risks are not always known with certainty. *Precaution*, in the regulatory context, generally refers to the notion of regulating in the face of uncertainty about risk. Precaution implies *ex ante*, rather than *ex post*, regulation. Rather than waiting to see what harms occur and then regulating—what has been called a "trial and error" approach²—precaution implies prevention of potential but uncertain harms.

From a normative perspective, exactly what degree of precaution is optimal is a contested topic. Many critics of the use of precaution argue that overly precautionary regulation simply substitutes one set of risks—for example, those from existing technologies—for risks inherent in a new, regulated technology.³ And it is empirically true that in many instances new substances or practices are regulated more stringently than existing substances or practices.⁴ Proponents of precaution counter that precaution is necessary, particularly with regard to some kinds of new technology, because of the potentially grave risks they present and because remedial action is not always possible. In these situations, they argue, precaution is essential.

While precaution is a contested concept, it can be broadly conceptualized in terms of "burdens of proof." In a general sense, precautionary regulation is one in which the burden falls on the proponent of the new substance, act, or technology to demonstrate that it is *not* harmful. Regulation is permitted in the absence of such a showing, and only after

^{1.} I wish to thank Steven Megibow for assistance with research on US and Canadian statutes—author.

Aaron Wildavsky, Searching for Safety (1988).

^{3.} E.g.: Frank B. Cross, *Paradoxical Perils of the Precautionary Principle* (1996); Peter Huber, The Old-New Division in Risk Regulation, 69 *Virginia Law Review* 6 (1983); Julian Morris, ed., *Rethinking Risk and the Precautionary Principle* (2000).

^{4.} See, e.g., the discussion of the US Toxic Substances Control Act, infra.

such a showing can the substance, act, or technology be sold or used. A non-precautionary regulation, by contrast, places the burden on the regulator to affirmatively show harm from an action, substance, etc. In the latter, regulation occurs remedially—only after showing a harm (hence the phrase "trial and error"). A key issue is the default position: can a particular action or product or decision go forward unless stopped, or is it stopped unless affirmatively permitted to go forward? The burden analogy does not, however, address the standard of review used. For example, a law might set a high level of certainty about risk before a particular act or substance may be banned or controlled, or it may use a much lower evidentiary standard. The former is arguably less precautionary than the latter.

In short, precaution is a variegated concept. In this paper the analytic focus is on federal domestic statutes that, at a minimum, permit the regulator to regulate where harm is anticipated or believed to be likely, rather than requiring harm to be demonstrated.

It is important to underscore that the concept of precaution has developed a special meaning in international law. In international law precaution is usually expressed in terms of the "precautionary principle." This principle is meant as a regulatory guide, and is sometimes claimed to be a principle of customary international law.5 While its status in international law is highly contested, the precautionary principle is increasingly referred to in both international environmental law and international trade law agreements. Article 15 of the 1992 Rio Declaration provides a typical definition: "Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures." This formulation is reflected in other international agreements, such as the Convention on Biological Diversity and the Sanitary and Phytosanitary Agreement of the World Trade Organization. This more specific definition of precaution is not used in this paper, except where domestic statutes themselves refer to the international legal "precautionary principle."

B. Scope and Organization of Paper

This paper examines precautionary terminology in the *federal statutes* of the three NAFTA parties: Canada, Mexico, and the United States. These federal statutes address a wide range of topics, but many are environmental or natural resource-related. Because precaution is

^{5.} Daniel Bodanksy, "Customary (and Not So Customary) International Environmental Law", 3 *Indiana Journal of Global Legal Studies* 105 (1995).

^{6.} e.g., EC Measures Concerning Meat and Meat Hormones, WTO/DS26/AB/R 1997.

open to many different definitions, and because treatment of risk is ubiquitous in regulation, this paper focuses on examples in which regulation may commence without a prior showing of harm: e.g., where the burden of demonstrating safety falls on the proponent of the act, technology, or substance, or where the government is empowered to act where it may "reasonably anticipate" harm.

In many cases elaborate regulations are promulgated pursuant to these federal statutes. In addition, judicial decisions and interpretations can significantly influence the meaning and application of precautionary statutory language. But for reasons of scope, in this paper only the *statutory terminology* itself is described and analyzed. After describing several examples of precautionary language from the domestic federal statutes of each party, the commonalities and differences among precautionary terminology are analyzed. It is important to underscore that the examples of precaution are *illustrative rather than comprehensive*; there are undoubtedly many other examples of precautionary terminology in federal statutes. Part II of the paper covers Canada; Part III, the United States; and Part IV, Mexico. Part V compares and contrasts the examples described.

II. EXAMPLES OF PRECAUTION IN CANADIAN FEDERAL LEGISLATION

A. Plant Protection Act

The purpose of the *Plant Protection Act* is "to protect plant life and the agricultural and forestry sectors of the Canadian economy by preventing the importation, exportation, and spread of pests and by controlling or eradicating pests in Canada." Pests are defined broadly. The Act prohibits any party from moving, growing, raising, culturing, or producing any thing for which there are "reasonable grounds to believe [it] is a pest, that is or could be infested with a pest, or that constitutes... a biological obstacle to the control of a pest." When a government inspector reasonably believes that a potential pest has been illegally exported into Canada, the inspector may require the party in possession to remove it from Canada.

This statutory language applies the concept of precaution by authorizing the Canadian government to act without scientific certainty

^{7.} S.C. 1990, c. 22, s. 2.

^{8.} *Id.* at s. 6.

^{9.} Id. at s. 8.

to prevent harm from pests and by not limiting the government to remedial measures. Both the reasonable belief standard and the use of terminology such as "could be" ("...a pest") indicate that full certainty is not required before regulation may commence.

B. Hazardous Products Act

This Act prohibits the advertising, sale or import into Canada of hazardous products. Specific types of hazardous products are listed in a schedule to the Act. The schedule may be amended to include "any product, material or substance that is or contains a poisonous, toxic, flammable, explosive... product, material or substance or other product, material or substance of a similar nature that the Governor in Council is satisfied is or is likely to be a danger to the health or safety of the public." ¹⁰ In addition, a product designed for household, garden or personal use for which the Governor in Council "is satisfied is or is likely to be a danger to the health or safety of the public by reason of its design, construction or contents" ¹¹ may also be deemed hazardous and added to the schedule.

The Act employs precautionary terminology in that products, materials and substances may be prohibited even in the absence of a showing that they are dangerous: the relevant standard, "likely to be a danger," is precautionary.

C. Health of Animals Act

This Act governs the treatment and protection of animals that may be exposed to diseases and/or toxic substances. In addition to requiring notice to veterinary inspectors where disease is suspected, the Act requires that "where there exists in an area a disease or toxic substance that is capable of affecting animals" and reasonable steps have been taken by the government to bring this to the attention of animal owners or caretakers, "every person" [i.e., an owner or animal caretaker] "in that area must affix a notice on the place where the animals are kept forbidding entry without the person's permission." The government may further require that owners or caretakers affix a notice prohibiting entry without a government inspector's permission.

^{10.} R.S. 1985, c. H-3, s. 1.

^{11.} Ibid.

^{12.} See *Health of Animals Act of 1990*, s. 7 under "Control of Diseases and Toxic Substances, Notification and Samples," http://www.canlii.org/ca/sta/h-3.3/sec7.html>.

The Act uses precautionary terminology in that it governs the treatment of animals that may be exposed to diseases or toxic substances, and does not require affirmative proof of exposure before regulatory measures, such as entry restrictions, are required.

D. Canadian Environmental Protection Act

This Act is the cornerstone of Canadian federal environmental law. The preamble states that "the Government of Canada is committed to implementing the precautionary principle" and refers to the Rio Declaration definition found in Part I of this paper. Reference to precaution and the specific language of the precautionary principle as it has been articulated in international law appears elsewhere in the statute. For example, s. 6(1.1) specifically obliges the National Advisory Committee to apply the precautionary principle when it gives advice to the Ministers of Environment and Health. Section 76.1 states that the Ministers of Environment and Health "shall apply a weight of evidence approach and the precautionary principle" when they assess substances or review decisions related to particular substances that may be toxic. ¹³ In all, there are four explicit references to the precautionary principle in the Act. ¹⁴

Moreover, when a substance is determined to be toxic or is "capable of becoming toxic," and "the Ministers are satisfied that the substance may have a long-term harmful effect on the environment," it can be regulated. Elsewhere, the Act states that "Where the Ministers… suspect that substance is toxic or capable of becoming toxic, the Minister may, before the expiry of the period for assessing the information… prohibit any person from manufacturing or importing the substance; or request any person to provide any additional information or submit the results of any testing that the Ministers consider necessary…" ¹⁶

This Act differs from the other legislation described in this paper (with the exception of the *Canadian Oceans Act*, see below) in that it refers directly to the precautionary principle, as found and formulated in several international legal agreements, and in fact specifically uses the definition that appears in the 1992 Rio Declaration of the United Nations Conference on Environment and Development (UNCED). It also contains language that is precautionary on its own terms; e.g., substances may be regulated if they are deemed "capable of becoming toxic" and "may have a long-term harmful effect on the environment."

^{13.} Chapter 33, s. 76.1.

^{14.} Pollution Probe, Applying the Precautionary Principle to Standard Setting (n.d.), at 54.

^{15.} Id. at s. 76.3.

^{16.} Id. at s. 84.1.

E. Feeds Act

This statute prohibits any person from manufacturing, selling or importing animal feed into Canada unless the feed meets certain specified standards, including pre-market inspection and registration under the Act. Most pertinently, the Act prohibits feed that "may adversely affect animal or human health." ¹⁷

The use of the term "may adversely affect" eliminates the need to prove harm on the part of the regulator and is precautionary. In addition, the inspection and registration requirements illustrate in a general way the reversal of burden associated with precaution: feed is assumed harmful unless sellers or importers affirmatively present the feed for inspection by the government, and the inspection is passed. Only then may the feed be marketed.

F. Pest Control Products Act

This Act regulates products used for the control of pests and the organic functions of plants and animals. ¹⁸ Under the Act "no person shall sell in or import into Canada any control product unless the product has been registered as prescribed; conforms to prescribed standards; and is packaged and labeled as prescribed. ^{"19} A "control product" is any product or substance "that is manufactured, represented, sold or used as a means for directly or indirectly controlling, preventing, destroying, mitigating, attracting or repelling any pest. ^{"20}

Similar provisions for pre-market registration are found in the 1985 *Seeds Act*, which requires that, with minor exceptions, "no person shall sell, import into Canada or export from Canada any seed unless the seed conforms to the prescribed standard and is marked and packed and the package labeled as prescribed."²¹ Any seed not so registered is prohibited from being sold, advertised for sale, or imported into Canada.²² The Act grants the Governor in Council authority to make regulations establishing minimum standards of purity, germination, quality, and disease.

^{17.} R.S. 1985, c. F-9, s. 3.

^{18.} Id., s. 1.

^{19.} R.S., c. P-10, s. 3.

^{20.} Ibid.

^{21.} Ibid.

^{22.} R.S.C. 1985, c. S-8, s. 3(1).

The *Pest Control Products Act* and the *Seeds Act* employ a form of precaution by requiring pre-market registration of products before they can be sold. Pest control products and seeds, respectively, must comport with pre-established government standards, without requiring a showing that non-conformance with those standards would result in harm to the environment, public health, or agriculture.

G. The Oceans Act

The preamble to the *Oceans Act* states that "Canada promotes the wide application of the precautionary approach to the conservation, management, and exploitation of marine resources in order to protect these resources and preserve the marine environment." The Act requires the development and implementation of a national strategy for the management of marine-related ecosystems that must be based on three principles: sustainable development; integrated management of estuaries, coastal and marine waters; and the precautionary approach.²⁴

III. EXAMPLES OF PRECAUTION IN UNITED STATES FEDERAL LEGISLATION

A. Toxic Substances Control Act

The *Toxic Substances Control Act* of 1976, with subsequent revisions, grants the Environmental Protection Agency (EPA) broad power to regulate risks from exposure to chemical substances, while providing chemical manufacturers with procedural safeguards against EPA's use of that power. There are several provisions in the Act which contain precautionary terminology. Section 6 provides EPA with the authority to regulate a chemical substance when the agency finds "a reasonable basis" to conclude that the manufacture, use, or disposal of a chemical substance "will present an unreasonable risk of injury to health or the environment." 25

If the EPA finds that a particular chemical meets this standard, EPA shall require that testing take place "to develop data with respect to the health and environmental effects for which there is an insufficiency of data and experience and which are relevant to a determination that the [chemical] does or does not present an unreasonable risk of injury to

^{23.} S.C. 1996, c. 31(6); see also Pollution Probe, Applying the Precautionary Principle to Standard Setting (n.d.), at Appendix 22.

^{24.} Pollution Probe, id.

^{25. 15} USC s. 2605(a).

health or the environment."²⁶ Moreover, if EPA determines that the information available is insufficient to permit a reasoned evaluation of the health and environmental effects of a chemical, and EPA believes that "such substance either enters or may reasonably be anticipated to enter the environment in substantial quantities or there is or may be significant or substantial human exposure to the substance," EPA may regulate the chemical.²⁷

Very similar pre-market approval and registration provisions are found in a related statute, the *Federal Insecticide, Fungicide, and Rodenticide Act*, which regulates various forms of pesticides. The *Insecticide, Fungicide, and Rodenticide Act* requires that a product be registered with EPA before it can be marketed. The EPA must refuse or withdraw registration if it finds that the use of a pesticide is "likely to result in unreasonable adverse effects on health or the environment." ²⁸

The statutory terminology in the *Toxic Substances Control Act* reflects precaution in several ways. At a general level, new chemicals are treated differently from existing chemicals.²⁹ Existing chemicals can only be regulated when unreasonable risk is demonstrated by EPA; new chemicals, however, can be regulated even in the absence of sufficient data when it can be *reasonably anticipated* that substantial human exposure will occur. For new chemicals, EPA may engage in precautionary regulation even in the absence of sufficient information—an intrinsically precautionary approach. Registration and prior notification rules also instantiate the concept of precaution. In the case of pesticides, the *Insecticide, Fungicide, and Rodenticide Act* presumes that pesticides are intrinsically hazardous, and this Act also requires *ex ante* registration and clearance before marketing is permitted. These provisions employ precaution in the sense of requiring regulatees to register and test their products before they are released on the market.

B. Sustainable Fisheries Act

The Sustainable Fisheries Act amends the Magnuson Fishery Conservation and Management Act. It aims to control and address overfishing. The Sustainable Fisheries Act establishes Regional Fishery Management councils. The Secretary of Commerce must report annually to the US Congress and the Fishery Management councils on the status of fisheries

^{26.} Id., s. 2603(a).

^{27.} Id., s. 2604(e).

^{28.} Richard Merrill, Federal Regulation of Cancer-Causing Chemicals, Report to the Administrative Conference of the United States (1982), at 32.

^{29.} US submission to the CEC, at 1.

within each council's area of authority, and must identify those fisheries that are either overfished or are approaching a condition of being overfished. "Overfished" means a rate of fish mortality that "jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis." ³⁰ If a fishery is declared overfished the Act requires the development of a Fishery Management Plan. This plan must contain measures "necessary and appropriate for the conservation and management of the fishery, to prevent overfishing and rebuild... stocks, and to protect, restore, and promote the long-term health and stability of the fishery." ³¹

The Act's use of terminology such as "necessary... to prevent overfishing," particularly when the statutory definition of overfishing includes jeopardization of the capacity of a fishery, reflects a precautionary approach to regulation. Rather than requiring an affirmative showing of fishery collapse or harm, jeopardization of capacity—in other words, the possibility of overfishing—is enough to trigger the Act's regulations. Moreover, fishery management plans are required even if fisheries are merely approaching a condition of being overfished. This provision, requiring preemptive action, also reflects precaution. Rather than awaiting an actual collapse of a fishery, regulation takes place when the fishery is jeopardized or approaching a state of collapse.

C. 1977 Clean Air Act Amendments

The *Clean Air Act* is the major US federal air quality statute. The Act requires EPA to maintain a list of air pollutants, "emissions of which, in [EPA's] judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare."³² The Act also requires the maintenance of a list of hazardous substances, and the statute itself provides such a list. The EPA is authorized to review this list and add pollutants "which present, or may present… a threat of adverse human health effects… or adverse environmental effects."³³

Similarly, EPA may regulate fuels and fuel additives "if in the judgment of [EPA] any emission product of such fuel or fuel additive causes, or contributes to, air pollution which may reasonably be anticipated to endanger the public health or welfare..."³⁴ The *Clean Air Act* Amendments of 1977 authorize the Administrator of the EPA to regulate

^{30. 18} USC s. 1802, para. 29.

^{31.} Id., s. 1853(a).

^{32. 42} USC s. 7408.

^{33.} Id. s. 7412.

^{34.} *Id.* s. 7545.

"any substance... which in his judgement may reasonably be anticipated to affect the stratosphere, especially ozone in the stratosphere, if such effect may be reasonably anticipated to endanger public health or welfare." 35

This terminology employs a strong element of precaution, because the Act authorizes regulation of substances which "may be reasonably anticipated" to affect stratospheric ozone if that effect "may be reasonably anticipated" to endanger health or welfare. Full certainty of effect on the ozone layer, and of endangerment to public health or welfare due to that effect, is not necessary.

D. Federal Food, Drug, and Cosmetic Act

The Food, Drug, and Cosmetic Act requires that products falling within those categories (food, etc.) generally be reviewed and approved before they can be marketed. Any marketed food is subject to regulation if any substance that it bears or contains is "poisonous or deleterious" and that substance "may render" the food "injurious to health. "36 The sponsor of a food additive is required to make an affirmative showing of safety for the additive. The 1958 Food Additives Amendment (commonly known as the "Delaney Clause") requires that any food additive be found safe before the Food and Drug Administration may approve its use in food.³⁷ Safety is defined as a "reasonable certainty of no harm."³⁸ This finding may not be made if the proposed food additive has been shown to induce cancer in man or in experimental animals. A food additive is something for which the intended use "results or may reasonably be expected to result, directly or indirectly, in its becoming a component or otherwise affecting the characteristic of any food."39 A precondition for being a food additive is that the substance not be "generally recognized, among experts... as having been adequately shown... to be safe under the conditions of its intended use."40

In addition to the Delaney Clause discussed above, there are in fact two other closely-related Delaney Clauses—for animal drugs and color additives—that employ essentially the same language.⁴¹ Other parts of

^{35. 42} USC s. 7671.

^{36. 21} USC s. 342(a)(1).

^{37.} Id., s. 348(c)(3)(A).

^{38.} *Id.*, s. 301.

^{39.} Id., s. 321(s).

^{40.} *Ibid.* In addition, if the substance was used in food prior to 1958, it is grandfathered into the regulatory scheme.

^{41.} US FDA, Precaution in US Food Safety Decisionmaking (3 March 2000), para. 90.

the *Federal Food*, *Drug*, *and Cosmetic Act* provide that any pesticide residue on food "shall be deemed unsafe"—and therefore cannot be distributed in commerce—unless an exemption is issued.⁴² In establishing maximum residue levels for pesticides, the Act requires an additional ten-fold safety factor to be added to an identified threshold of harm, in order to protect infants and children. Inspection provisions in related statutes for certain categories of food—such as meat and poultry products—require that inspections take place before the product can be sold or marketed.⁴³

These provisions employ terminology consistent with the concept of precaution. The banning by the Delaney Clause of all carcinogenic substances without regard for level of risk is consistent with a strong form of precaution. Under the Act, additives must be found safe before marketed, rather than marketed until harm is shown. The pesticide residue standard is similar: the manufacturer must request and obtain an exemption to distribute; without this, distribution is barred. The definition of a food additive requires that the substance in question not have been found safe. If it has not been found safe, it is an additive and therefore requires a use regulation or an exemption before it can be marketed. The requirement of pre-market approval, as well as the pre-market inspection provisions for meat, poultry and other specified categories of food, is consistent with precaution as a concept that provides for regulation unless a produce is proven safe.

E. National Environmental Policy Act

The *National Environmental Policy Act* requires that the federal government use "all practicable means... to improve and coordinate federal plans, function, programs, and resources, to the end that the Nation may... attain the widest range of beneficial uses of the environment without degradation, risk to health and safety, or other undesirable and unintended consequences." ⁴⁴ In particular, all federal agencies must draft "environmental impact statements" on major federal actions "significantly affecting the quality of the human environment." ⁴⁵ Federal agencies must also "identify and develop methods and procedures... which will ensure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking..." ⁴⁶

^{42. 21} USC s. 408(a)(1).

Federal Meat Inspection Act, 21 USC s. 601ff; Poultry Products Inspection Act, id., s. 451ff.

^{44. 42} US s. 4331(b)(3).

^{45.} Id., s. 4332(c).

^{46.} *Id.*, s. 4332(b).

The Act employs a weak form of the concept of precaution in its requirement that all major federal actions affecting the environment be preceded by an environmental impact statement. Environmental impact statements are not in themselves binding on the government or other actors, but they are a form of informational regulation, forcing information creation before an action or decision takes place. The Act's overall aim is to minimize, through information provision and new decision-making methods, harmful impacts on the environment. The impact statements, and the requirement that agencies develop decision methods that address environmental amenities, are broadly consistent with the notion of precaution.

F. Endangered Species Act

The aim of the *Endangered Species Act* is the preservation of endangered and threatened species and of the ecosystems they inhabit. The Act defines an endangered species as "any species which is in danger of extinction throughout all or a significant portion of its range." ⁴⁷ A threatened species is "any species which is likely to become an endangered species throughout all or a significant portion of its range. "⁴⁸ A determination that a species is either endangered or threatened results in restrictions on certain activities that may harm the species. In addition, federal agencies must ensure that any proposed action "is not likely to jeopardize the continued existence" of any listed species. ⁴⁹

Similar language exists in the *Marine Mammal Protection Act*, which, though it does not apply only to threatened or endangered species, requires that applicants for permits to take marine mammals show that the taking will not have adverse effects.⁵⁰

In the *Endangered Species Act*, precaution is present in the statutory language addressing the listing process as well as in statutorily-triggered responses to listing. For listing, a species does not need to go extinct, but rather must only be "in danger of extinction" to be listed as endangered. Full certainty is not required. Similarly, for threatened species the "likely to become an endangered species" standard employs precautionary terminology: by definition, a species need not be shown to be endangered to fall within the "threatened" category, only likely to

^{47.} The Endangered Species Act of 1973, s. 3(6).

^{48.} Id., s. 3(20).

^{49.} Id., s. 7(a)(2).

 ¹⁶ USC s. 1371; see Dan Bodansky, "The Precautionary Principle in US Environmental Law," in Tim O'Riordan and James Cameron, eds., *Interpreting the* Precautionary Principle (1994).

become endangered. The stronger precautionary tone of the language for endangered species arguably reflects that extinction is irreversible. For threatened species, which face by definition a lower level of danger, the terminology used is less precautionary: they must be "likely to become" endangered.

Precaution is even more strongly reflected in the provision that federal agencies must ensure that actions are "not likely to jeopardize" a listed species. Here harm to a species need not be affirmatively shown; rather, the likelihood of jeopardizing the species is the triggering standard. The very concept of jeopardy is that harm is not certain.⁵¹ That jeopardy is further modified by "not likely to" strengthens the precautionary nature of the provision.

G. Surface Mining Control and Reclamation Act

Under this Act, surface mine operators must post a performance bond when applying for a mining permit.⁵² Applications must also include plans for compliance with relevant environmental regulations which are intended to ensure that affected land is reclaimed and impacts on the environment are limited. Bonds are recovered if adequate reclamation of the site is demonstrated.

Performance bonds are precautionary in that they require an "upfront commitment of resources to safeguard against potentially damaging future outcomes." ⁵³ While the scope of these damages is often foreseeable, the exact nature is unknown *ex ante*. The bond ensures that adequate resources exist to address damages *ex post*.

H. Clean Water Act

The *Clean Water Act* requires that effluent limitations for point sources of water pollution (such as factories) require the application of "best practicable control technology." Modifications to this standard are permitted if "such modification will not result in the discharge of pollutants in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment..." ⁵⁴ Permits to release

^{51.} US submission at 3.

^{52.} US submission at 4.

^{53.} Laura Cornwell and Robert Costanza, "Environmental Bonds: Implementing the Precautionary Principle in Environmental Policy," in Carolyn Raffensperger and Joel Tickner, eds., Protecting Public Health and the Environment: Implementing the Precautionary Principle (1999), at 221, cited in US submission at 4.

^{54. 33} USC 1311.

effluents are required, and may be modified in some cases. No permit which modifies secondary water treatment requirements may be issued, however, which authorizes "the discharge of any pollutant into saline esturarine waters which at the time of application do not support a balanced indigenous population of shellfish, fish and wildlife, or allow recreation in and on the waters... The prohibition contained in the preceding sentence shall apply without regard to the presence or absence of causal relationship between such characteristics and the applicant's current or proposed discharge." ⁵⁵

The Act also requires that the states of the US establish "total maximum daily loads" for specified pollutants; "such load shall be established at the level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality."

The "reasonably anticipated" terminology for permit modification is precautionary and tracks that used in many other US environmental protection statutes, such as the *Clean Air Act*. The "without regard to the presence or absence" of a causal relationship is precautionary in that whether or not the proposed discharge will impact water quality, if the quality is currently unfavorable no discharge is permitted. Thus discharges are barred even if they will not cause harm, if some measure of harm is already present. Finally, the "margin of safety" language with regard to maximum daily loads explicitly requires regulators to act in a precautionary manner when setting standards.

IV. EXAMPLES OF PRECAUTION IN MEXICAN FEDERAL STATUTES

A. Ley General del Equilibrio Ecológico y la Protección al Ambiente (LGEEPA-General Law of Ecological Equilibrium and Environmental Protection)

LGEEPA is Mexico's general environmental statute. LGEEPA defines prevention (*prevencion*) as measures and decisions taken prior to damage to the environment. Under the Mexican system of federalism, however, powers of prevention are granted more to the states than to the federal government. In addition, Article 28 states that any activity, product, or substance that "may cause" an ecological imbalance (*desequilibrio ecológico*) must first be evaluated through an environmental

^{55.} Ibid.

impact assessment provided by the producer. This applies to several specific categories of activity, including oil, forestry, mining, and toxic wastes.

B. Ley Federal sobre Metrología y Normalización (Federal Law on Metrology and Standardization)

Article 48 permits the federal government to issue emergency measures (normas oficiales mexicanas) whenever there is a potential risk of products threatening human health. Many rules issued pursuant to this provision have a precautionary character. For example, in 1999, Semarnap (Secretaría de Medio Ambientes, Recursos Naturales, y Pesca—now Semarnat) issued an emergency standard establishing the requirements and measures to prevent and control the spread of shrimp diseases, including a temporary ban on shrimp imports.

C. Ley General de Salud (General Health Law)

Article 3 empowers the Mexican Ministry of Health to issue all pertinent orders to "prevent and control" the harmful effects of the environment on human health. Article 282 of this law requires that manufacturers inform the Ministry of Health of all products derived from biotechnology used for human consumption. Articles 402 and 404 permit the issuance of orders to "protect" human health, and these orders may include elimination of advertising, bans on products or activities, etc. Article 402 describes these as "safety measures... issued by the competent health authority, in accordance to these legal prescriptions and other related rules, to protect the population's health." Article 414 establishes that the impoundment of objects, products or substances may take place when there is a "presumption" (presunción) that they are harmful to human health. Under Mexican law this is a juris tantum presumption: safety measures may be taken by the health authority unless the act or substance is proved harmless.

D. Ley Federal de Sanidad Animal (Federal Animal Health Law)

The chapter on Animal Health Emergencies establishes safety measures to ban any danger posed by infectious diseases, in Article 35. These are called "emergency animal health national devices" (dispositivo nacional de emergencia de sanidad animal).

^{56.} Translation by Prof. González-Oropeza.

Article 46 of the *Flora Health Federal Act* addresses, for phytosanitary emergencies, the same risks and similarly permits the issuance of emergency standards.

E. Ley Forestal (Forestry Law)

The Forestry Law empowers Semarnap to supervise and enforce all actions to prevent and fight against fires and other threats to forest health (Article 5). Potential exploiters of forest resources must apply for permits from Semarnap, and these applications must include an environmental impact assessment as well as a "forest management program." This program must include all measures taken for the conservation and protection of the habitat of endangered species as well as for the avoidance of hazardous impacts on the ecosystem generally. Under Article 45, Semarnap also is empowered to foreclose the establishment, revoke the authorization, or seize any object that, according to specific reports or environmental audits, may produce an imminent risk or grave harm to forest ecosystems.

F. Ley de Aguas Nacionales (National Water Law)

Under Title Seven of the National Water Law, programs and actions to prevent and control water pollution may be decided by designated water authorities. Article 150 of the implementing rules entitles the National Water Commission to promote any measure to prevent and control water pollution. In all the cases, however, the burden of proof rests upon the water authority rather than the user. For example, when the stoppage of water treatment plants may cause *grave harm to public health, population safety or harm to the ecosystem*, the National Water Commission, by *explicit request* of an authority, may order the suspension of activities that produce waste discharge upon the waters (Article 94).

V. ANALYSIS

As the preceding examples illustrate, precaution is central to many federal regulatory statutes in the NAFTA parties. But precaution is a broad concept, and consequently the degree to which precaution can be said to be reflected in domestic statutory law is contestable and sensitive to the concept of precaution used. Empirically, the statutes surveyed above employ precautionary terminology in several ways. These are discussed below, in roughly ascending order of precaution; i.e., from the least precautionary to the most precautionary.

A. Requiring pre-market approval or registration of products

Several surveyed statutes contain requirements that products, such as chemicals or pesticides, be registered or approved prior to being produced, marketed or imported. For example, the Canadian Pest Control *Products Act* states that no person shall sell in or import into Canada any pest control product "unless the product has been registered as prescribed; conforms to prescribed standards; and is packaged and labeled as prescribed."57 This language represents a weak form of precaution: by requiring registration for all products in the relevant market, these products are made known to the government (and presumably more readily regulated and controlled, or banned, in the future). The requirement that relevant new products conform with generalized standards can in practice also be weakly precautionary: such standards are likely to be based on safety or health concerns that themselves may be precautionary. Lastly, terminology of this kind reflects the shifting of burden that characterizes precautionary regulation generally: all products within the relevant category must register and conform with regulatory standards ex ante, rather than requiring an affirmative showing of harm or specified risk ex post.

B. Permitting regulation when harm is possible but not certain

The majority of statutes reviewed in this paper incorporate precaution by explicitly permitting regulators to act where harms are possible or are anticipated, or where risks are deemed "unreasonable." This type of statutory language reflects the core idea of precaution: regulation can occur when risks are uncertain. Often, the standard is "likelihood" of harm or "reasonable anticipation." This terminology provides some discretion to regulators.

For example, regulation is permitted in the absence of certainty in the Mexican *Ley Federal sobre Metrología y Normalización*, which authorizes the use of emergency measures whenever there is a potential risk in products that threaten human health. Similarly, the US *Clean Air Act* Amendments of 1977 authorize the Administrator of the EPA to regulate "any substance... which in his judgment may reasonably be anticipated to affect the stratosphere, especially ozone in the stratosphere, if such effect may be reasonably anticipated to endanger public health or welfare." The US *Endangered Species Act* provides that federal agencies must ensure that any proposed action "is not likely to jeopardize the

^{57.} R.S., c. P-10, s. 1.

^{58. 42} US 7671.

continued existence" of any listed species.⁵⁹ The *Canadian Hazardous Products Act* authorizes regulation for "any product, material or substance that is or contains a poisonous, toxic, flammable, explosive... product, material or substance or other product, material or substance of a similar nature that the Governor in Council is satisfied is or is likely to be a danger to the health or safety of the public."⁶⁰ The language in each of these examples permits government actors to make a judgment about risk in situations of uncertainty (e.g., "likely to jeopardize" or "likely to be a danger") and to regulate based on that judgment.

Some statutes contain precautionary language that expressly permits interim or provisional regulation, but requires that relevant scientific data be gathered or tests performed. Like the preceding examples, this kind of terminology is precautionary and shifts the burden of proving safety or risk onto the manufacturer or user. But rather than permitting or requiring regulation on a semi-permanent basis when risk or harm is uncertain, this type of language explicitly keys precautionary regulation to the duration of the uncertainty and sometimes requires affirmative efforts to reduce uncertainty.

For example, the US *Toxic Substances Control Act* provides EPA with the authority to regulate a chemical when the agency finds "a reasonable basis" to conclude that the manufacture, use, or disposal of a chemical substance "will present an unreasonable risk of injury to health or the environment." When such risk is deemed present, the Act requires that testing take place "to develop data with respect to the health and environmental effects for which there is an insufficiency of data and experience and which are relevant to a determination that the [chemical] does or does not present an unreasonable risk of injury to health or the environment." Thus EPA is required to affirmatively act to reduce uncertainty when it regulates in a precautionary manner.

C. Reference to the international precautionary principle

The statutes described in this paper generally contain language which is precautionary in nature but which does not explicitly refer to either the general concept of precaution or to the international formulation of the precautionary principle. The *Canadian Environmental Protection Act*, in its preamble, states that "the Government of Canada is

^{59.} Id., s. 7(a)(2).

^{60.} R.S., c. H-3, s. 1.

^{61. 15} USC s. 2605(a).

^{62.} Id., s. 2603(a).

committed to implementing the precautionary principle" and refers to the Rio Declaration formulation of this principle (slightly different formulations appear in other international legal instruments). Reference to the specific language of the precautionary principle also appears elsewhere in the statute. The Act was recast in 2000, and arguably represents the rising importance of the precautionary principle as an explicit principle in environmental law.

D. Requiring affirmative proof of safety to permit use/marketing

Most precautionary language in the statutes examined above permits regulation when harm is reasonably certain or unreasonable risk is present. This provides some latitude to regulators but expressly authorizes precautionary action. Indeed, against the traditional backdrop of "trial and error" regulation, this kind of language represents a serious departure. But statutes can also go further and require that substances or products be "proven" safe. To be sure, proving safety is not possible with certainty: many products once thought safe, such as clorofluorocarbons, later turned out to be quite harmful. But the standard of certainty for safety can be set very high, and the result is highly precautionary regulation.

For example, the *US Food, Drug, and Cosmetics Act Food Additives Amendment* (the "Delaney Clause") requires that any food additive be found safe before the Food and Drug Administration may approve its use in food.⁶³ Safety is defined as a "reasonable certainty of no harm."⁶⁴ This finding may not be made if the proposed food additive has been shown to induce cancer in man or in experimental animals. The Delaney Clause is precautionary in that it permits regulation under uncertainty, but it goes further than many statutes in that it sets a high substantive standard: reasonable certainty of no harm, with the additional criterion that the substance in question cannot be shown to be a carcinogen.

VI. CONCLUSION

The preceding overview of precautionary terminology in the federal legislation of the three NAFTA parties illustrates that precaution, as a risk-regulatory concept, is well-entrenched domestically. Precautionary terminology in domestic statutes also substantially pre-dates the international law version of the "precautionary principle." While pre-

^{63. 21} USC s. 348(c)(3)(A).

^{64.} Id., s. 301.

caution is fundamentally about attempting to err on the side of safety, as the examples surveyed illustrate there are many, often quite varied, ways to approach and implement precaution.

Precaution in International Environmental Policy and United States Law and Practice

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Table of Contents

I.	IN	ΓRO	DUCTION	5
II.			TICAL METHODOLOGIES FOR IMPLEMENTING UTION	7
	A.	Int	rnational Formulations of Norms for Precaution 22	7
		1.	Non-binding Statements	7
			a. Rio Declaration	8
			b. Other Non-binding Instruments	9
		2.	Treaties	0
			a. Persistent Organic Pollutants (POPs) 23	1
			b. Climate	1
			c. Biodiversity	2
			d. Long-range Transboundary Air Pollution 23	3
			e. Marine Environment	3
			f. Fisheries	4
			g. Transboundary Watercourses 23	5
	B.	A	ypology of Precautionary Decision Making 23	5
		1.	Variations in International Formulations for Precaution	7

			a. Lack of Certainty
			b. Likelihood and Severity of Harm 239
			c. Policy Responses
			d. Cost-effectiveness
			e. Differential Criteria 241
		2.	Kinds of Scientific Uncertainty
			a. Quantifiable Uncertainties 242
			(1) Measurement Uncertainties 242
			(a) Random errors
			(b) Systematic errors 243
			(2) Sampling Uncertainties 243
			(3) Modeling Uncertainties 244
			b. Fundamental or Irreducible Uncertainties 244
		3.	Science in the Public Policy Process
		4.	Range of Policy Responses
III.	UN	IITE	D STATES FEDERAL LAW 249
	A.	Leg	gislation
		1.	Procedural Tools Facilitating Precaution
			a. Requirements for Prior Approval
			b. Requirements for Prior Notification 252
			c. Requirements for Prior Study
			c. requirements for Frior Study

		2.	Substantive Mandates
			a. Zero Tolerance
			b. Health- and Safety-based Criteria 255
			c. Risk-based Tests
			d. Technology-based and Cost-benefit Requirements
	B.	Juc	icial Decisions
		1.	The Ethyl Case
		2.	OSHA Cases
		3.	Testing of Chemicals
		4.	Reserve Mining Co. v. EPA
IV.	EX	AM	PLES OF US STATE AND LOCAL INITIATIVES 265
	A.	Ca	ifornia Proposition 65
	B.	Ma	ssachusetts Toxic Use Reduction Act 266
	C.	Bay	Area Dioxin Phaseout
	D.		Angeles School District Integrated Pest

I. INTRODUCTION

The concept of precautionary decision making has received considerable attention in the context of such global environmental issues as stratospheric ozone depletion, climate change, and biotechnology. Those debates, having reached a relatively high level of sophistication and refinement, of late have tended to crystallize around discrete questions that are both highly controversial and occasionally somewhat remote from real-world considerations. One relatively esoteric concern is the status of precaution in customary international law, a question about which there is an apparent lack of consensus, but one whose resolution either way is likely to have relatively little concrete impact. Even the terminology employed, such as references to a "precautionary principle" as opposed to "precautionary approaches," can be an occasion for vociferous disagreements.

Stepping back somewhat from some of the international dissension, precaution is an inherent part of day-to-day life in decisions that are made by individuals and governments alike. Everyone is familiar with the concept of making decisions under conditions of uncertainty or incomplete information, whether expressly labeled "precautionary" or not. For example, a recent report of the US General Accounting Office1 found no conclusive evidence that radio frequency energy emitted by cellular telephones poses a health risk. On the other hand, the report noted that "the findings of some studies have raised questions about cancer and other health problems that require further study" and that "there is not yet enough information to conclude that they pose no risk." Similarly, the Royal Society, an independent scientific academy in the United Kingdom, has been unable to give conclusive answers as to the presence or absence of health risks to armed forces personnel from depleted uranium in armor-piercing shells used in the Persian Gulf and Kosovo. Its most recent report² concludes that "radiological risks from

US General Accounting Office, Telecommunications: Research and Regulatory Efforts on Mobile Phone Health Issues (Report no. GAO-01-545, 7 May 2001) (available at web site http://frwebgate.access.gpo.gov/cgi-bin/useftp.cgi?IPaddress=162.140.64.8 8&filename=d01545.txt&directory=/diskb/wais/data/gao>).

^{2.} Royal Society, *The Health Hazards of Depleted Uranium Munitions*, Part I, at 8 (22 May 2001) (available at web site http://www.royalsoc.ac.uk/templates/search/websearch.cfm?mainpage=/policy/reports.htm).

the use of [depleted uranium] are for the most part low, but that for small numbers of soldiers there might be circumstances in which risks are higher, and it is for this reason that further work should be undertaken to clarify their extent."

Most individuals, institutions and governments are also familiar with the need on occasion to act even when risks are uncertain or incompletely characterized. For instance, in June 2001 and effective later this year, the American Red Cross, a private organization, voluntarily tightened its restrictions beyond the good practice standard established by guidelines issued by the US Food and Drug Administration (FDA)³ on blood donations from travelers who had been to Europe because of concerns about bovine spongiform encephalopathy (BSE). Likewise, US FDA has proposed prohibiting at least one drug and scrutinizing others for use in animal feeds because of concerns about the transfer of resistance to human pathogens, despite a lack of consensus about the potential harm from their continued use.4

This paper examines the role of a regulatory philosophy of precautionary decision making in United States law and policy. Because of the high level of multilateral activity with potentially significant implications for national and international policies, the paper first identifies international authorities articulating the need for precaution. Next, the paper analyzes variations in those formulations and evaluates their significance. The paper then goes on to consider precaution as it might be understood from the perspective of the role of science in the regulatory process.

^{3.} See Royal Society, *The Health Hazards of Depleted Uranium Munitions and BSE* (6 June 2001) (available at web site http://www.redcross.org/services/biomed/blood/supply/tse/bsepolicy.html). See also American Red Cross Urges Tightened Restrictions on Blood Donors Who Reside in Europe: Red Cross President and CEO Describes Policy As "Prudent, Cautious" (18 January 2001) (available at web site http://www.redcross.org/services/biomed/blood/supply/1%2D18%2D01b.html) (Red Cross urges FDA further to tighten restrictions on blood donations).

^{4.} See 65 Fed. Reg. 64,954 (31 October 2000) (notice of opportunity for hearing concerning FDA's proposed withdrawal of approval of new animal drug application for use of fluoroquinolone enrofloxacin in poultry). See also FDA Center for Veterinary Medicine, An Approach for Establishing Thresholds in Association With the Use of Antimicrobial Drugs in Food-Producing Animals (19 December 2000) (available at web site http://www.fda.gov/cvm/antimicrobial/threshold21.pdf); Use of Antimicrobial Drugs in Food Animals and the Establishment of Regulatory Thresholds on Antimicrobial Resistance (available on web site http://www.fda.gov/cvm) (transcripts of public meeting, held 22-24 January 2001, on issues identified in previous document).

The second major portion of the paper scrutinizes precautionary theories as interpreted in the United States. Federal legislation is assessed, case studies involving the application of federal statutory mandates are presented, and judicial opinions interpreting federal law are evaluated. The paper concludes with an examination of selected examples of precaution as applied by subnational entities, such as the constituent states of the United States.

II. ANALYTICAL METHODOLOGIES FOR IMPLEMENTING PRECAUTION

A large number of international instruments of a normative nature, both non-binding and legally binding, now articulate expectations for precautionary decision making. All those instruments identify circumstances under which it is desirable for governmental decisions to reflect a preference for precaution under conditions of uncertainty. To understand how precautionary decision making might work in practice, it is consequently helpful to have a perspective on both the regulatory process and theories of uncertainty. Accordingly, this section first surveys international norms for precaution and then addresses approaches to regulation and the scientific treatment of uncertainty or error.

A. International Formulations of Norms for Precaution

Although they have roots in domestic approaches such as the German *Vorsorgeprinzip*, precautionary methodologies have rapidly become the subject of a wide variety of international exhortations and obligations. Because the products from multilateral deliberations are driving so much of the debate over precautionary perspectives on governmental decision making, this section examines some of the salient international contexts in which precaution has been articulated as an approach to formulating public policy.

As the focus of this paper is United States law and policy, the authorities analyzed are confined to those in which the United States Government participated in negotiations and which do or might apply to the United States. Many of these same instruments could or do apply to Canada and Mexico as well. The following compilation is intended to be illustrative as opposed to exhaustive.

1. Non-binding Statements

Non-binding instruments may serve a number of purposes. One important function of "soft" law is consciously to establish normative

expectations, which often function as standards of good practice for states and governments. The texts of non-binding instruments are typically phrased in terms of "shoulds" rather than the obligatory "shalls" characteristic of binding obligations, which are more frequently found in the "hard" law created by treaties and international agreements. While not creating formal international legal obligations, these advisory instruments can nonetheless establish widely accepted criteria for desirable or sound state practice. Adjectives typically applied to this category of instruments include "hortatory," "precatory," and "aspirational." Many of the non-binding exhortations encouraging states to take measures based on a theory of precaution also apply generally, in contrast to the typically more discrete subject matter areas addressed by treaty obligations, as discussed in section II.A.2 below.

a. Rio Declaration

The most generally applicable exhortation to apply precautionary governmental decision-making processes appears in Principle 15 of the Rio Declaration on Environment and Development,⁵ a non-binding recommendation adopted at the United Nations Conference on Environment and Development (UNCED), attended by over a hundred heads of state or government in 1992. The text of that instrument provides as follows:

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

This statement, while not legally binding, is not confined to a particular subject matter area and is therefore quite broad in application.

The desirability of public policies based on precaution is also identified in the Bergen Ministerial Declaration on Sustainable Development in the ECE Region,⁶ the final statement from a preparatory meeting of European states, the United States and Canada that preceded UNCED.

^{5. 14} June 1992, UN Doc. A/Conf.151/5/Rev. 1 (1992), 31 ILM 876 (1992).

^{6. 16} May 1990, para. 7, 20 Environmental Policy and Law 100 (1990) ("In order to achieve sustainable development, policies must be based on the precautionary principle. Environmental measures must anticipate, prevent and attack the causes of environmental degradation. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.")

Agenda 21, the action plan for the future adopted at UNCED, also contains references to precaution.⁷

b. Other Non-binding Instruments

The final communiqué of the G-8 summit held in Okinawa in 2000,8 in paragraph 56 under the heading of "Biotechnology/Food Safety," endorses the Codex Alimentarius Commission's "efforts...to achieve greater global consensus on how precaution should be applied to food safety in circumstances where available scientific information is incomplete or contradictory."

More generally, the Houston Economic Summit Declaration⁹ from the G-7's 1990 meeting, in paragraph 62, states that "...in the face of threats of irreversible environmental damage, lack of full scientific certainty is no excuse to postpone actions which are justified in their own right."

The 1992 summit declaration of the Conference for Security and Cooperation in Europe (CSCE)¹⁰ stated that "the use of economic and fiscal instruments in addition to regulatory instruments is important in order to implement, at national level, the 'polluter-pays' principle, as well as the precautionary approach."

^{7.} Paragraph 17.21 of Agenda 21, UN Doc. A/Conf./151/4 (1992), reprinted in *The Earth Summit: The United Nations Conference on Environment and Development (UNCED)* 125 (Stanley P. Johnson, ed., 1993), provides as follows:

A precautionary and anticipatory rather than a reactive approach is necessary to prevent the degradation of the marine environment. This requires, inter alia, the adoption of precautionary measures, environmental impact assessment, clean production techniques, recycling, waste audits and minimisation, construction and/or improvement of sewage treatment facilities, quality management criteria for handling of hazardous substances, and a comprehensive approach to damage impact from air, land and water. Any management framework must include the improvement of coastal human settlements and the integrated management and development of coastal areas.

Paragraph 35.2 states:

In the face of threats of irreversible environmental damage, lack of full scientific understanding should not be an excuse for postponing actions which are justified in their own right. The precautionary approach should provide a basis for policies relating to complex systems that are not yet fully understood and whose consequences and disturbances cannot yet be predicted.

^{8. 23} July 2000 (available at web site http://www.g7.utoronto.ca/g7/summit/2000okinawa/finalcom.htm).

 ¹¹ July 1990 (available at web site http://www.g7.utoronto.ca/g7/summit/1990houston/communique/environment.html).

^{10.} Helsinki Summit Declaration, 10 July 1992, pt. VIII, para. 3, 31 ILM 1389 (1992).

A number of non-binding recommendations adopted by the Organization for Economic Cooperation and Development (OECD) contain references to precaution. Among those is a 1990 recommendation on integrated pollution prevention and control, 11 which in an appendix entitled "Guidance on integrated pollution prevention and control" contains the following language under the heading "Essential Policy Aspects:"

Certain policies, common to all aspects of environmental protection, are essential to an effective integrated approach. These include that...

d) the absence of complete information should not preclude precautionary action to mitigate the risk of significant harm to the environment.

2. Treaties

In contrast to the Rio Declaration and other non-binding instruments, statements concerning precautionary decision making in treaties are legally binding. Treaty obligations, in contrast to the "soft," non-binding instruments identified in the previous section, in principle are legally enforceable under international law. However, binding obligations of treaty origin also have some limitations in scope. As treaties in international law are formed on a consensual theory similar to that of contracts in municipal legal systems, their obligations apply only to those states party to the treaty in question. Second, such statements, like the treaties in which they are embedded, tend to be confined to relatively discrete subject matter areas. Consequently, the language dealing with precaution in a particular treaty is likely to be specific to the subject matter covered by the agreement, and is not necessarily generally applicable to all regulatory decision making. The number of treaty references to precautionary decision making is now quite large. This section identifies some of the more significant examples.¹²

^{11.} OECD Doc. C(90)164.

^{12.} Another possible source of binding or "hard" law is custom, which arises from a pattern and practice of states motivated by a sense of legal obligation (opinio juris). In contrast to "soft" instruments such as the Rio Declaration, which do not articulate legally enforceable obligations, and treaties, which do so only for those states that have given their express consent, a requirement to implement precaution as a matter of customary law in principle could bind states that had not affirmatively indicated their intent to accept the obligation. There does not appear to be international agreement as to whether the conditions for the existence of customary international standards for precaution have been satisfied.

a. Persistent Organic Pollutants (POPs)

The most recent articulation of precaution as a public policy is contained in the Stockholm Convention on Persistent Organic Pollutants, ¹³ adopted at a diplomatic conference on 23 May 2001. In the preamble ¹⁴ to that instrument, the parties declare that they are

Acknowledging that precaution underlies the concerns of all Parties and is embedded in this Convention.

Operative Article 1, entitled "Objective," provides as follows:

Mindful of the precautionary approach as set forth in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Convention is to protect human health and the environment from persistent organic pollutants.

Article 8, addressing the listing of additional chemicals governed by the agreement at the initiative of one of the parties, states in paragraph 9 that the Conference of the Parties shall act on such a proposal "in a precautionary manner." Annex C, part V, directs parties in considering best available techniques for preventing or reducing releases of chemicals regulated by the agreement, to take into account considerations of "precaution and prevention."

b. Climate

The 1992 United Nations Framework Convention on Climate Change¹⁵ in article 3, paragraph 2 states that:

The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects.

^{13.} Available at web site http://www.chem.unep.ch/pops/POPs_Inc/dipcon/meetingdocs/conf-2/en/conf-2e.pdf. The United States signed this agreement, which has not yet entered into force.

^{14.} The preamble to a treaty is generally considered to establish its contextual setting as opposed to containing substantive obligations. See Vienna Convention on the Law of Treaties, 22 May 1969, art. 31, para. 2, 8 ILM679 (1969) (identifying elements of context of treaty as "the text, including [the treaty's] preamble and annexes"). Hence, the identification of precaution in preambular language, depending on its phraseology, may have a different legal significance from that in the operative text. The Vienna Convention on the Law of Treaties, although not in force for the United States, has been accepted by the Executive Branch as a codification of customary international law regarding international agreements. See S. Exec. Doc. L, 92d Cong., 1st Sess. (1971), at 1; Restatement (Third) of the Foreign Relations Law of the United States pt. III, introductory note (1987).

^{15. 9} May 1992, 31 ILM 851 (1992). The United States is a party to this instrument.

Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost.

The 1990 Ministerial Declaration on the Second World Climate Conference, an important non-binding precursor to the Convention, also contains a reference to precaution.¹⁶

c. Biodiversity

While not mentioning precaution by name, the United Nations Convention on Biological Diversity (Biodiversity Convention)¹⁷ contains the following preambular language:

Noting also that where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat[.]

The Cartagena Protocol on Biosafety, ¹⁸ an ancillary agreement to the Biodiversity Convention, specifies in article 1, entitled "Objective," as follows:

In accordance with the precautionary approach contained in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Protocol is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects

^{16. 7} November 1990, para. 7, 20 Environmental Policy and Law 220 (1990) ("In order to achieve sustainable development in all countries and to meet the needs of present and future generations, precautionary measures to meet the climate challenge must anticipate, attack, or minimize the causes of, and mitigate the adverse consequences of, environmental degradation that might result from climate change. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent such environmental degradation. The measures adopted should take into account different socio-economic contexts.").

^{17. 22} May 1992, 31 *ILM* 822 (1992). The United States has signed but not ratified this agreement. Article 18 of the Vienna Convention on the Law of Treaties, *supra*, note 14, provides that "[a] State is obliged to refrain from acts which would defeat the object and purpose of a treaty when... it has signed the treaty or has exchanged instruments constituting the treaty subject to ratification, acceptance or approval, until it shall have made its intention clear not to become a party to the treaty..."

 ²⁹ January 2000 (available at web site http://www.biodiv.org/biosafety/proto-col.asp). The United States has not signed this instrument, which has not yet entered into force.

on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements.

This instrument also contains a preambular reference "reaffirming the precautionary approach contained in Principle 15 of the Rio Declaration on Environment and Development."

d. Long-range Transboundary Air Pollution

The second sulfur protocol of 1994¹⁹ to the Convention on Long-Range Transboundary Air Pollution (LRTAP),²⁰ negotiated under the auspices of the UN Economic Commission for Europe, contains two preambular paragraphs in which the parties to the instrument declare that they are

Resolved to take precautionary measures to anticipate, prevent or minimize emissions of air pollutants and mitigate their adverse effects, [and]

Convinced that where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that such precautionary measures to deal with emissions of air pollutants should be cost-effective[.]

Similarly, in preambular language to the Aarhus Protocol on Persistent Organic Pollutants to the Convention on Long-Range Transboundary Air Pollution,²¹ the parties to that instrument declare themselves:

Resolved to take measures to anticipate, prevent or minimize emissions of persistent organic pollutants, taking into account the application of the precautionary approach, as set forth in principle 15 of the Rio Declaration on Environment and Development[.]

e. Marine Environment

Once it enters into force, the Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter

^{19.} Oslo Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution, on Further Reductions of Sulfur Emissions, 14 June 1994, 33 *ILM* 1540 (1994). Although the United States is a party to the LRTAP Convention, it is not a party to the Oslo Protocol, which entered into force in 1998.

Convention on Long-Range Transboundary Air Pollution (LRTAP), 13 November 1979, 18 ILM 1442 (1979).

^{21. 24} June 1998, 37 *ILM* 505 (1998). The United States has signed but not ratified this agreement, which has not yet entered into force.

(London Dumping Convention)²² will supersede the existing 1972 instrument for parties to both agreements.²³ Article 3, paragraph 1 of the Protocol specifies that

In implementing this Protocol, Contracting Parties shall apply a precautionary approach to environmental protection from dumping of wastes or other matter whereby appropriate preventive measures are taken when there is reason to believe that wastes or other matter introduced into the marine environment are likely to cause harm even when there is no conclusive evidence to prove a causal relation between inputs and their effects.

This language is virtually identical to a provision in a 1991 resolution adopted by the parties to the London Dumping Convention.²⁴

Another instrument adopted under the auspices of the International Maritime Organization (IMO), the International Convention on Oil Preparedness, Response and Co-operation,²⁵ refers in preambular language to "the importance of precautionary measures and prevention in avoiding oil pollution in the first instance..."

f. Fisheries

Article 5, entitled "General Principles," of the UN straddling stocks agreement adopted in 1995,26 specifies

In order to conserve and manage straddling fish stocks and highly migratory fish stocks, coastal States and States fishing on the high seas shall, in giving effect to their duty to co-operate in accordance with the Convention...

(c) apply the precautionary principle in accordance with Article 6[.]

^{22. 7} November 1996, 36 *ILM*1 (1997). The United States has signed the Protocol, which has not yet entered into force.

^{23.} Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 13 November 1972, 11 *ILM* 1294 (1972).

^{24.} IMO Doc. LDC 44(14).

 ³⁰ November 1990, 30 ILM 735 (1991). The United States has signed but not ratified this instrument, which entered into force in 1995.

^{26.} Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, 4 August 1995, 34 ILM 1547 (1995). The United States has ratified this agreement, which has not yet entered into force.

Article 6, entitled "Application of the Precautionary Approach," is devoted in its entirety to principles of precaution. That provision provides in part:

- 1. States shall apply the precautionary approach widely in conservation, management and exploitation of straddling fish stocks and highly migratory fish stocks in order to protect the living marine resources and preserve the marine environment.
- States shall be more cautious when information is uncertain, unreliable or inadequate. The absence of scientific information shall not be used as a reason for postponing or failing to take conservation and management measures.

An annex to the agreement consists of guidelines for application of precautionary reference points in conservation and management of straddling fish stocks.

g. Transboundary Watercourses

According to the 1992 ECE convention on transboundary water-courses,²⁷ in the operative language of article 2, paragraph 5,

...the Parties shall be guided by the following principles:

(a) The precautionary principle, by virtue of which action to avoid the potential transboundary impact of the release of hazardous substances shall not be postponed on the ground that scientific research has not fully proved a causal link between those substances on the one hand, and the potential transboundary impact on the other hand.

B. A Typology of Precautionary Decision Making

Precautionary precepts apply a heuristic approach along the lines of the adage "better safe than sorry." A precautionary perspective would urge governmental decision makers to err on the side of anticipating and preventing uncertain harm. The texts contained in the international instruments identified in section II.A above take a variety of approaches in applying precaution to governmental decision-making processes. Moreover, some issues necessarily encountered in applying precautionary methodologies are barely alluded to in the international

^{27.} Convention on the Law of the Non-navigational Uses of International Water-courses, 17 March 1992, 36 *ILM* 700 (1997). The United States is not a party to this agreement, which entered into force in 1996.

texts. After analyzing the variety of international approaches, this section undertakes to articulate a comprehensive approach to precautionary decision making that reflects these considerations.

A helpful framework in which to analyze precautionary exhortations, and one which is frequently employed in debates over precaution in a variety of domestic and international settings in the United States and abroad, bifurcates the regulatory process into two phases: "risk assessment," which in principle establishes the strictly scientific basis for regulatory action, and "risk management," which is the multidisciplinary process of choosing regulatory measures. In this two-stage methodology, scientific questions are isolated and addressed in an objective manner through risk assessment methodologies at the beginning of the regulatory process. Pure policy choices are supposedly confined to the second phase, risk management. At this stage, science may

28. As described by a former Administrator of the US Environmental Protection Agency:

Risk assessment is an exercise that combines available data on a substance's potency in causing adverse health effects with information about likely human exposure, and through the use of plausible assumptions, it generates an estimate of human health risk. Risk management is the process by which a protective agency decides what action to take in the face of such estimates. Ideally the action is based on such factors as the goals of public health and environmental protection, relevant legislation, legal precedent, and application of social, economic, and political values.

William D. Ruckelshaus, Risk, Science, and Democracy, *Issues in Sci. & Tech.*, Spring 1985, at 19, 28. Another influential publication has described the distinction as follows:

We use *risk assessment* to mean the characterization of the potential adverse health effects of human exposures to environmental hazards. Risk assessments include several elements: description of the potential adverse health effects based on an evaluation of results of epidemiologic, clinical, toxicologic, and environmental research; extrapolation from those results to predict the type and estimate the extent of health effects in humans under given conditions of exposure; judgments as to the number and characteristics of persons exposed at various intensities and durations; and summary judgments on the existence and overall magnitude of the publichealth problem. Risk assessment also includes characterization of the uncertainties inherent in the process of inferring risk.

The term *risk assessment* is often given narrower and broader meanings than we have adopted here. For some observers, the term is synonymous with *quantitative risk assessment* and emphasizes reliance on numerical results. Our broader definition includes quantification, but also includes qualitative expressions of risk. Quantitative estimates of risk are not always feasible, and they may be eschewed by agencies for policy reasons. Broader uses of the term than ours also embrace analysis of perceived risks, comparisons of risks associated with different regulatory strategies, and occasionally analysis of the economic and social implications of regulatory decisions–functions that we assign to risk management.

Committee on the Institutional Means for Assessment of Risks to Public Health, Commission on Life Sciences, National Research Council, *Risk Assessment in the Federal Government: Managing the Process* 18 (1983) (emphasis in original).

be relevant for such tasks as evaluating technical options. Risk management decisions, however, also engage other considerations, most notably social values.²⁹

Within the framework of the risk assessment/risk management duality, there appears to be agreement that precautionary approaches are relevant, if at all, at the risk management phase.³⁰ There is less of a consensus about the role of precautionary elements in the risk assessment process. In particular, there has been concern that some formulations of precautionary approaches to risk assessment might allow governments to use cultural preferences and other nonscientific factors in making risk management decisions. The United States in particular has identified the potential for governmental measures based on precautionary rationales to serve as trade barriers.³¹

1. Variations in International Formulations for Precaution

International authorities generally identify the following features common to precautionary decision making: (1) an indication of a potential for harm; (2) uncertainty in the data set that might lead to a conclusion of a potential for harm; and (3) the desirability of a public policy response to reduce that potential at an early juncture. Within this general framework, as demonstrated by the texts quoted below, there is some variability in multilateral formulations of precautionary methodologies.

a. Lack of Certainty

As with any normative approach, binding or not, most formulations of precautionary norms for governmental decision making identify the universe of actions to which those tests will apply. A central

^{29. &}quot;[R]isk management... describes the process of evaluating alternative regulatory actions and selecting among them. Risk management, which is carried out by regulatory agencies under various legislative mandates, is an agency decision-making process that entails consideration of political, social, economic, and engineering information with risk-related information to develop, analyze, and compare regulatory options and to select the appropriate regulatory response to a potential chronic health hazard. The selection process necessarily requires the use of value judgments on such issues as the acceptability of risk and the reasonableness of the costs of control." National Research Council, supra, note 28, at 18-19 (emphasis in original).

^{30.} See, e.g., Communication from the Commission on the Precautionary Principle, summary para. 4, EU Doc. COM (2000) 1 (2 February 2000) (http://europa.eu.int/eur-lex/en/com/cnc/2000/com2000_0001en01.pdf)("The precautionary principle is particularly relevant to the management of risk.")

^{31.} See, e.g., White House Policy Declaration on Environment and Trade, infra, note 45.

component of precautionary heuristics is their application to situations involving uncertainty, which can be regarded as one element of the "trigger" or condition precedent for invoking precautionary methodologies. This aspect of precaution, concerning at least in part the scientific predicate for governmental action, is best understood as an element of the risk-assessment phase of regulatory decision making.³²

Principle 15 of the Rio Declaration is typical in specifying its application to situations characterized by "lack of full scientific certainty." Other instruments using this identical formulation include the Bergen Ministerial Declaration, the 1990 G-7 Houston summit communiqué, the UN Climate Convention, the Second World Climate Conference declaration, the UN Biodiversity Convention, and the second sulfur protocol to the LRTAP Convention. The numerous references to Principle 15 of the Rio Declaration by name implicitly incorporate this normative prescription by reference.

The Okinawa G-8 summit declaration applies to biotechnology and food safety issues "where available scientific information is incomplete or contradictory." The 1990 OECD recommendation on integrated pollution prevention refers to "the absence of complete information." Agenda 21 refers to "policies relating to complex systems that are not yet fully understood and whose consequences and disturbances cannot yet be predicted." The protocol amending the London Dumping Convention refers to situations in which "there is no conclusive evidence to prove a causal relation between inputs and their effects." The straddling stocks agreement takes as its reference point "information [that] is

^{32.} In this context, "risk assessment" does not necessarily imply only a quantitative risk assessment, which would arguably restrict the application of precautionary methodologies. For example, in the dispute settlement proceedings initiated by the United States and Canada in the World Trade Organization (WTO) against the European Union over hormone-treated beef, the WTO Appellate Body expressly recognized that a "risk assessment" need not necessarily be quantitative in nature. European Communities-Measures Concerning Meat and Meat Products, WTO Doc. No. WT/DS26/AB/R & WT/DS48/AB/R, paras 186-87 (16 January 1998): "the imposition of... a quantitative requirement finds no basis in the [Uruguay Round Agreement on the Application of Sanitary and Phytosanitary Standards, whose interpretation was at issue in the dispute]... [T]o the extent that the Panel purports to exclude from the scope of a risk assessment... all matters not susceptible of quantitative analysis by the empirical or experimental laboratory methods commonly associated with the physical sciences, we believe that the Panel is in error". This conclusion is particularly compelling because the Appellate Body found that a precautionary principle, as asserted by the European Union, did not control the interpretation of the Uruguay Round SPS Agreement. Id. at para. 125. Consequently, there would be, if anything, less of a need for quantification of risk in situations, such as those which are the subject of this paper, in which precautionary methodologies would be applicable.

uncertain, unreliable or inadequate" and refers to "[t]he absence of scientific information." The ECE Convention on transboundary water-courses applies in instances in which "scientific research has not fully proved a causal link between those substances on the one hand, and the potential transboundary impact on the other hand."

Particularly in light of current approaches to processing scientific uncertainty discussed in section II.B.2.a below, the variability in textual formulations among some of the sources probably has little, if any, significance. In light of the current international debate over precaution, one variation that might have some significance is the presence or absence of the qualifier "scientific" or its equivalent in describing the information base against which precautionary precepts should or must be applied. Among the instruments surveyed, only the 1990 OECD recommendation, Agenda 21, and the protocol amending the London Dumping Convention fail to identify the factual predicate for action as "scientific" in nature. Those authorities, moreover, certainly do not exclude scientific considerations. Based on these texts, it consequently would appear to be reasonable to expect, as a general matter, that the factual predicate for the exercise of precaution would be based on scientific data.

b. Likelihood and Severity of Harm

The Rio Declaration is typical of many of the instruments examined in specifying that precautionary approaches apply to situations involving "threats of serious or irreversible damage." Again, those instruments that allude to Principle 15 by name would be assumed to incorporate this criterion by reference. Additionally, the UN Climate Convention, the second sulfur protocol to the LRTAP Convention, and the Bergen Ministerial Declaration include the identical textual formulation.

The Houston Summit communiqué is confined to "threats of irreversible damage." The 1990 OECD recommendation on integrated pollution prevention speaks of "the risk of significant harm to the environment." The formulation in the UN Biodiversity Convention addresses "a threat of significant reduction or loss of biological diversity," a test which is clearly unique to the subject matter of that agreement. The protocol amending the London Dumping Convention covers situations in which "there is reason to believe that [ocean dumping is] likely to cause harm." The ECE Convention on Transboundary Watercourses speaks of "potential transboundary impact."

While the precise wording varies among the instruments surveyed, all either explicitly or implicitly incorporate the notion of probability of adverse consequences within their scope of applicability. Most of the formulations expressly utilize either the word "threat" or "risk" to embody this concept. In light of the purpose of public policies based on precaution—to assure early intervention in the face of uncertainty—the choice of one or the other term probably should not be regarded as carrying any particular significance.³³

Similarly, the language addressing the magnitude or severity of harm that will qualify for the application of precaution varies among the different instruments. The various formulations identify a variety of thresholds of likelihood of effects, which can be considered to lie at various points on a spectrum. At one end of this continuum are "threats of serious or irreversible damage." At the other end is at least one example speaking of "impact[s]" without qualification, with other tests such as "significant harm" lying between the two. In contrast to the criterion related to likelihood of harm, these different formulations do appear to convey disparities in underlying intent. This suggests that, with respect to the factor of severity of harm qualifying for the application of precautionary decision making, there would be a need to identify which instruments or authorities apply to a given situation with some particularity.

c. Policy Responses

Given the apparently wide agreement, as discussed in section II.B above, on the treatment of precaution as a risk management response, the authorities surveyed in this paper have remarkably little to say about the purpose, from a public policy point of view, of the measures contemplated as a result of the application of precautionary methodologies. Although the Rio Declaration, as discussed in the next section, includes a cost-effectiveness criterion, it otherwise speaks only of "measures."

Among those instruments that specifically address this question, the policy goals are related to specific contexts, and even those tend to be general rather than specific. The UN Climate Convention states that precautionary measures should "anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects," and the Second World Climate conference declaration includes similar language. The Biodiversity Convention identifies the need to "avoid or minimize" threats to biodiversity. The second ECE sulfur protocol identifies the need to "anticipate, prevent or minimize emissions of air pollutants and mitigate their adverse effects."

^{33.} With respect to the need for quantification of risks or threats, see note 32 supra.

d. Cost-effectiveness

Among the instruments surveyed, a number specify that the risk-management measures contemplated should be "cost-effective." These include the Rio Declaration, the Ministerial Declaration from the Second World Climate Conference, and the second ECE sulfur protocol. As before, it would probably be most appropriate to interpret those instruments that reference the Rio Declaration consistently with this criterion. The UN Climate Convention further reinforces the need for cost-effective measures by adding that the purpose of this criterion is "to ensure global benefits at the lowest possible cost." As indicated by this last example, cost-effectiveness implies a choice of measure with the lowest cost that still leads to a result consistent with precepts of precaution. Again, just as the inclusion of a cost-effectiveness criterion in some of the instruments is an indication of the intent of their drafters, the absence of such a test in those that omit it would also have interpretive significance.

e. Differential Criteria

The Rio Declaration qualifies its exhortation for states to apply a precautionary approach with the phrase "according to their capabilities." This appears to be an indication of a graduated or differential test whose application is intended to be different for countries at various stages of economic development. While several of the instruments identified above have differential substantive obligations for developing countries, none of the other formulations of precautionary norms contain a similar qualification. Once again, however, this factor would also be relevant to those instruments that reference the Rio Declaration.

2. Kinds of Scientific Uncertainty

While referring to "uncertainty," the formulations of criteria for precautionary decision making surveyed for this paper have remark-

^{34.} Particularly by reference to the purpose of precautionary approaches, the concept of cost-effectiveness should be contrasted with a cost-benefit test. A criterion of cost-effectiveness implies the identification of a precautionary goal, with the subsequent choice of risk-management measures that achieve that goal with the lowest cost. By contrast, a cost-benefit test could imply that an otherwise precautionary outcome might be precluded if the overall benefits of the action did not exceed the costs. See, e.g., Richard D. Morgenstern, "Conducting an Economic Analysis: Rationale, Issues, and Requirements", in Economic Analyses at EPA: Assessing Regulatory Impact 26 (Richard D. Morgenstern, ed. 1997). Significantly, none of the instruments surveyed articulate a cost-benefit test. Cf. section III.A.2.d infra (discussing US domestic legal instruments containing cost-benefit requirements).

ably little to say in elaborating the concept. While perhaps not the last word on the matter in a public policy setting, there is a reasonably well developed literature addressed to the nature of scientific uncertainty, both as applied in public policy contexts and otherwise.³⁵

a. Quantifiable Uncertainties

Although it may sound paradoxical, certain kinds of uncertainties are "knowable" in a meaningful sense because their outer bounds can be identified. Uncertainties in this sense can be expressed as a level of confidence in an experimental observation, a calculated result, or an inference from empirical data. Theories of scientific uncertainty in this sense have been well developed for a considerable time and include such elements as statistical treatment of data sets, criteria for determining the range of possible values indicating the reliability with which a measured or calculated value is appropriately reported, and procedures addressing the "propagation of error" resulting from a calculation based on two or more measured quantities, each characterized by their own error factors.³⁶

(1) Measurement Uncertainties

From a scientific perspective, the concept of "error" probably tracks most closely at least a portion of the concept intended to be captured in the term "uncertainty" as used in normative formulations for precautionary public policies. "Error" does not in general refer to outright computational mistakes. Rather, the scientific concept of error describes uncertainties in human capacity to observe and describe the natural world through experiment. Experimental errors, or measurement uncertainties, generally fall into two categories: random and systematic. Both arise because of imperfections in the measuring process.

(a) Random errors

Random errors manifest themselves in the scatter observed when empirically measured values diverge from one another on repeated iter-

^{35.} See, e.g., Vern R. Walker, "Risk Regulation and the "Faces" of Uncertainty", 9 *Risk: Health, Safety & Environment* 27 (1998); Vern R. Walker, "The Siren Songs of Science: Toward a Taxonomy of Scientific Uncertainty for Decisionmakers", 23 *Conn. L. Rev.* 567 (1991)

See, e.g., Yardley Beers, Introduction to the Theory of Error (1953); Philip R. Bevington, Data Reduction and Error Analysis for the Physical Sciences (1969).

ations of the measurement process. Random experimental error can arise because of fluctuating conditions in variables intended to be held constant, such as the temperature of a laboratory. Alternatively, random errors can arise because of small disturbances to the measurement apparatus. Random errors of this sort are characteristic of most if not all experiments, no matter how carefully designed. Random error is generally expressed by a range around a measured or calculated value. The reliability of the measurement is indicated by the expressed range of uncertainty; the smaller the range of observed measurements, the higher the precision of the measurement method.

(b) Systematic errors

In contrast to random errors, which can be expected to produce a data set clustering around the "true" value, systematic errors result in a deviation by a constant amount. Systematic errors can arise because of the nature of experimental design or technique, errors in calibration of instrumentation, or deviations in experimental conditions from those for which the experiment was calibrated. In some cases, systematic errors can be removed through the application of suitable corrections to compensate for the error. As in the case of random errors, scientific theory and practice in this area are reasonably well developed.

(2) Sampling Uncertainties

Uncertainty in measurements may be enhanced or reduced depending on the number of data points collected. This "sampling error" may result in imprecise inferences arising from potential errors or defects in sampling techniques, as in a toxicological study of the effects of a chemical on mice.³⁷ As a general matter, the larger the sample size the smaller the error. At the same time, economic or other factors may require inferences about large populations from relatively small samples. For example, this kind of uncertainty accounts for the confidence ranges typically reported in public opinion or political polling data. Sampling error can be processed quantitatively through the application of statistical methods, as expressed in such tests as statistical significance and confidence intervals.

^{37.} For reasons such as this, the US National Academy of Science has urged the Environmental Protection Agency to discontinue the practice of precisely defining "point estimates" of risk, and instead to offer a range of risks commensurate with the integrity of the underlying data set. See National Research Council, Science and Judgment in Risk Assessment (1994).

(3) Modeling Uncertainties

Uncertainties can also arise from the use of mathematical models that are frequently used to predict the behavior of natural systems with particular relevance to environmental problems such as stratospheric ozone depletion and global warming. In some cases, the predictive power of computer models can be quantified by identifying the correlation between the independent and dependent variables. Precautionary considerations can be taken into account in the selection of a model, as well as in the choice of model inputs and default values. For example, a precautionary perspective might counsel applying conservative assumptions in the absence of empirical data, as in assessing low-dose cancer risks. Uncertainties in scientific models can also arise, however, from more fundamental limitations in human capacity to model natural systems, in which case attempts to quantify uncertainties may fail to capture limits on the utility of the model.

b. Fundamental or Irreducible Uncertainties

An entirely different kind of uncertainty arises not from limitations on the capacity to observe natural systems accurately or precisely, but from a more fundamental limitation in observers' capacity to understand them. Various writers have identified different kinds of uncertainty in this category. For example, "concept uncertainty" arises from an inappropriate choice of variables for observation. "Causal uncertainty" can result from flawed reasoning from empirical data about mechanistic relationships. "Epistemic uncertainty" appears in situations of cumulative or additive exposures whose interactions may be poorly understood. These types of uncertainty are difficult or perhaps impossible to quantify.

Precaution as a public policy appears to be directed primarily to these categories of fundamental or irreducible uncertainty to a much greater extent than "traditional" scientific errors. So, for instance, precautionary decision-making methodologies as articulated in the instruments surveyed in this paper are arguably addressed to something more fundamental than choosing the upper as opposed to the lower bound identified by a risk assessment as a basis for risk management measures. Rather, at least one interpretation of a precautionary methodology addresses not uncertainties in the underlying data but in the inferences to be drawn from them.

For example, quantitative risk assessments include both "traditional" uncertainties, arising from the integrity of the underlying data

set, and "concept" uncertainties, related to assumptions concerning extrapolations from animals to humans or high to low doses. While both kinds of uncertainties are addressed by precautionary approaches, the intent seems to be specifically to include the latter in the "trigger" factor, or the determination that a precautionary approach ought to apply. So, for example, a precautionary perspective might be taken to counsel more aggressive risk management measures than suggested by a risk assessment applying even conservative assumptions in the estimation of low-dose cancer risks.

At the same time, science has relatively less to say about these kinds of fundamental or irreducible uncertainties, at least from a quantitative point of view. Indeed, it is very likely impossible to imagine a numerical calculus for such a purpose. Carried to its logical conclusion, a precautionary heuristic attempts to provide a public policy response designed to anticipate the unexpected or unpredictable.

There is no doubt that such situations exist, with potentially profound public policy implications. For example, notwithstanding an appreciation of the process by which chlorofluorocarbons deplete stratospheric ozone, computer models failed to predict the existence of the Antarctic ozone hole before its discovery in 1985.³⁸ As suggested by that example, there is no purely scientific methodology for addressing such uncertainties, in this case resulting from limits in human capacity to model natural systems.

Precautionary approaches appear to be designed to fill this gap. In the case of stratospheric ozone before the discovery of the Antarctic ozone hole, an application of the precautionary approach set out in Principle 15 of the Rio Declaration might have proceeded as follows: Scientific data in the early 1980s were interpreted as demonstrating the potential for some loss of stratospheric ozone. ³⁹ The potential for larger losses could be catastrophic, satisfying the textual test of a "threat[] of serious or irreversible damage." While the likelihood of such an outcome was poorly defined, it was nonetheless a possibility, satisfying Principle 15's test of a "lack of full scientific certainty." The remainder of the text would then counsel the earlier rather than later adoption of "cost-effective measures to prevent environmental degradation" from loss of stratospheric ozone.

^{38.} See, e.g., Richard Elliott Benedick, Ozone Diplomacy: New Directions in Safeguarding the Planet 19 (enlarged edition, 1998).

^{39.} See, e.g., 45 Fed. Reg. 66,726 (7 October 1980) (US Environmental Protection Agency advance notice of proposed rulemaking concerning chlorofluorocarbons).

3. Science in the Public Policy Process

Scientists often disagree among themselves, especially on issues at the cutting edge of regulatory policy that may involve considerable scientific uncertainty. 40 Even the supposedly strictly technical process of risk assessment involves the exercise of judgments reflecting underlying public policy biases. 41 Social value choices necessarily intrude into the analysis of physical phenomena by means of risk assessment methodologies through the selection of inferences and assumptions. Consequently, there is unlikely to be a single, unique way to analyze even the purely scientific significance of much empirical data in a public policy setting. As a result, in a regulatory context science may be relatively unhelpful when there is a genuine scientific dispute.

The scientific peer review process operating in a regulatory context can reduce disagreement, identify gaps and holes, and articulate the need for further investigation. Scientific peer review involves a sometimes protracted give and take among experts. Significantly, peer review does not anticipate the sort of bipolar "yes or no" result contemplated by an adjudicatory process. Instead, peer review is responsive to a characterization of science as an ongoing search for knowledge against a constantly shifting and evolving background that by its very nature is always operating at new frontiers. On the other hand, peer review in a

^{40.} As a former Administrator of the US Environmental Protection Agency has noted: Science is only orderly after the fact; in process, and especially at the advancing edge of some field, it is chaotic and fiercely controversial. Thus, the expectation built into environmental law, that science can provide definitive answers to the kinds of questions that policymakers are obliged to ask under the terms of that law, will be disappointed to the degree that such answers derive from the forward edge of research . . .

Nor can we order a consensus in the areas of greatest interest to environmental policy: pollutant exposure and effects. Policymakers, including me, have often deplored the tendency of scientific panels to engage in interminable debate rather than reach the agreement that was clearly indicated on the invitation. *Of course* scientists will disagree on issues involving the advancing edge of research; that is what they do for a living. And even if we could somehow get a group of scientists to endorse a consensus position, it would be, in the first place, only tentative and subject to revision with the arrival of new discoveries; and in the second place, it may be entirely wrong.

In science, the majority does not rule, as the history of science amply demonstrates. Ruckelshaus, *supra*, note 28, at 24 (emphasis in original).

^{41. &}quot;[S]ome people in the regulated community believe that the structure of risk assessment inherently exaggerates risk, while many environmentalists believe that it will not capture all the risk that may actually exist....[T]his disagreement is not resolvable in the short run through recourse to science. Risk assessment is necessarily dependent on choices made among a host of assumptions, and these choices will inevitably be affected by the values of the choosers, whether they be scientists, civil servants, or politicians." *Id.* at 28.

regulatory setting may also engage disputed, value-laden questions of science policy and may be unresponsive to the development of new scientific methodologies that, while lacking general acceptance, may none-theless be reliable.

Against this background, a precautionary approach can be taken to be one that gives particular credence to minority or dissenting scientific opinions that plausibly suggest the existence of a risk, notwithstanding some uncertainty, conceptual or otherwise. At an absolute minimum, precaution would tend to affirm the capacity of a government to regulate on the basis of minority or uncertain science, should it choose to do so. 42

4. Range of Policy Responses

As discussed in section II.B.1.c above, multilateral formulations of precautionary theories of regulation give relatively little attention to the choice of measure after a determination has been made that a precau-

 The US cases interpreting precautionary legislation, discussed in section III.B infra, imply a similar conclusion, based on a theory of deference to the judgment of a technically expert agency.

The question of deference to domestic regulation based on minority or uncertain science arose particularly pointedly during negotiations over trade-based disciplines on food safety measures in the context of the Uruguay Round of Multilateral Negotiations in GATT and the North American Free Trade Agreement. The Executive Branch of the United States Government, which negotiated those agreements, explained that

It is clear that the requirement in the [Uruguay Round SPS] Agreement that measures be based on scientific principles and not be maintained "without sufficient scientific evidence" would *not* authorize a dispute settlement panel to substitute its scientific judgment for that of the government maintaining the sanitary or phytosanitary measure. For example, by requiring that a measure be based on scientific principles (rather than, for instance, requiring that a measure be based on the "best" science) and not to be maintained without sufficient scientific evidence (rather than, for instance, requiring an examination of the "weight of the evidence"), the [SPS] Agreement recognizes the fact that scientific certainty is rare and many scientific determinations require a judgment among differing scientific views. The [SPS] Agreement preserves the ability of governments to make such judgments.

Uruguay Round Agreements Act, Statement of Administrative Action, H.R. Doc. No. 103-316, 103d Cong., 2d Sess. 656, 746, reprinted in 1994 US Code Cong. & Ad. News 4040, 4105 (emphasis in original). See also Office of the United States Trade Representative, Report on US Food Safety and the Uruguay Round: Protecting Consumers and Promoting US Export 5 (June 1994) (same). Cf. North American Free Trade Agreement Implementation Act, Statement of Administrative Action, H.R. Doc. No. 103-159, 103d Cong., 1st Sess. 450, 542 (1993) ("[t]he question is... not whether the measure was based on the 'best' science or the 'preponderance' of science or whether there was conflicting science. The question is only whether the government maintaining the measure has a scientific basis for it" [emphasis in original]).

tionary perspective is appropriate. United States legislation, as discussed in section III.A.2 below, articulates a variety of approaches to the relationship between risk on the one hand and risk management options on the other, and no single overarching principle can readily be discerned. 43

As a general matter, however, one can identify a variety of public policy responses to a risk or threat once a precautionary methodology has been determined to be appropriate. Indeed, one of the principal recommendations of advocates of more extensive use of precaution is the desirability or necessity of a systematic examination of a range of policy responses. Among the precautionary public policy measures that might be appropriate, depending on the circumstances, are the following:

- labeling or other risk communication strategies, which might be particularly appropriate in situations in which it is considered fitting for individual workers or members of the public to make determinations about their own exposures to risk;
- technical standards establishing manufacturing or processing specifications so as to reduce exposures to consumers, workers, or the environment;
- production or manufacturing limitations, or limitations for particular uses, for toxic substances with environmental and/or health effects;
- limitations on exposures, such as to pesticides in food or contaminants in drinking water or food;
- requirements for disposal for substances or wastes that may have adverse environmental effects;
- limitations on emissions of environmental pollutants to air, water and soil;

^{43.} By contrast, the European Union purports to have a relatively strict requirement for proportionality for all risk management measures, including those motivated by precautionary concerns. See Communication from the Commission on the Precautionary Principle, supra, note 30.

^{44.} See, e.g., Wingspread Statement on the Precautionary Principle, 25 January 1998, reprinted in *Protecting Public Health and the Environment: Implementing the Precautionary Principle* 353 (Carolyn Raffensperger & Joel Tickner, eds. 1999 ("The process of applying the Precautionary Principle... must... involve an examination of the full range of alternatives, including no action").

- taxes or fees on use or emission of substances with adverse environmental or public health effects;
- requirements for prior governmental approval for substances such as
 pesticides or pharmaceuticals where risks may be significant and the
 need for a prior demonstration of safety is paramount; and
- bans or absolute prohibitions, either because of the hazardous nature
 of the substance or process concerned, the availability of less hazardous alternatives, or the need to create incentives for the development
 of alternatives.

III. UNITED STATES FEDERAL LAW

Elements of precaution are found throughout US law—in the broad sense of legislation enacted by the Congress, regulations adopted by federal agencies, and judicial decisions and interpretations by US courts—addressing environment and public health. As noted in the White House Policy Declaration on Environment and Trade, a statement of the Executive Branch of government charged with implementing federal law:

Precaution is an essential element of the US regulatory system given that regulators often have to act on the frontiers of knowledge and in the absence of full scientific certainty. We believe that this precautionary element is fully consistent with WTO rules, which make clear that a regulatory agency may take precautionary action where there is a rational basis for concern based upon available pertinent information. We will insist that this ability to take precautionary action be maintained in order to achieve our environmental objectives.

At the same time, precaution must be exercised as part of a science-based approach to regulation, not a substitute for such an approach. In this connection, the term precaution must not be used as a guise for trade protectionist measures as this would have the effect of casting doubt upon, and even undermining, environmental as well as trade policy objectives. 45

A. Legislation

While precaution may be integral to much of US regulation on environment, health, safety, and the conservation of natural resources, the legislation in these areas has been adopted over a considerable

^{45.} White House policy declaration on environment and trade, 16 November 1999 (available at web site http://ustr.gov/environment/finpol.html).

period of time, now on the order of a century, often to address discrete problems. There is no single overarching regulatory philosophy that can be identified in a body of statutory enactments which is neither systematic nor comprehensive. While elements of precaution appear throughout US environmental regulation, the statutes governing this field must consequently be examined individually to identify the precautionary elements.⁴⁶

US federal legislation on environment, public health, worker safety, and natural resources is organized by discrete statutes, often addressing a single medium such as air or water, or a specific problem, such as hazardous wastes. In the interest of drawing larger inferences from this now quite massive compendium of statutory enactments, the following analysis does not address each statute individually. Rather, the treatment below is intended to identify precautionary themes in regulatory approaches that are common to a variety of legislative enactments.

Federal regulatory approaches that articulate precautionary policies can be divided into two broad classes: (1) procedural mechanisms, in which the structural form of the governmental decision-making process facilitates precautionary outcomes; and (2) substantive mandates, which establish outcome-oriented tests against which the results of governmental decision-making processes are intended to be measured.

1. Procedural Tools Facilitating Precaution

One common element of precautionary exhortations or directives, as discussed above, is a policy preference for identifying risks and anticipating and preventing adverse effects, in contrast to reacting to environmental harms after they have been suffered. United States law facilitates governmental decision making that is precautionary in this procedural sense by specifying certain requirements for governmental approval as a condition for entry into commerce, for advance notification of new substances or new uses, and for analysis preceding implementation of proposed governmental activities.

^{46.} Because the discussion of precaution as a public policy is most frequently encountered and most highly developed in the fields of environment and public health, the examples that follow are drawn from those areas. However, precaution as a regulatory philosophy can and has influenced legislative requirements relating to other subject matter, such as consumer protection, public safety, transportation, and securities, banking and insurance regulation.

a. Requirements for Prior Approval

Requirements for prior governmental approval serve a gate-keeping function by shifting the burden onto the proponent of a product, substance or activity to justify the approval sought, usually by reference to a predetermined test or criterion. Before or pending approval, the action for which the approval must be granted is ordinarily prohibited. For that reason, requirements for prior governmental approval are regulatory tools for expressing a conclusive public policy preference for erring on the side of caution, and are consequently inherently precautionary. If a product, substance or activity for which approval is required may present risks, those risks will not be experienced until the approval is granted.

United States law requires prior approval by the federal Environmental Protection Agency (EPA) before pesticides may be sold, ⁴⁷ and by the federal Food and Drug Administration (FDA) before food additives, human and animal drugs, and medical devices ⁴⁸ may be marketed. Although the terminology and procedural details differ somewhat, each of these authorities requires the submission of a request to a federal regulatory authority supported by appropriate studies, review of that request by the governmental entity, and affirmative approval by the regulatory authority concerned. These requirements can be interpreted as a concrete mechanism for assuring precautionary decision-making.

In the case of pesticides, for example, any pesticide residue on food presumptively "shall be deemed unsafe" 49 absent the establishment of a tolerance (maximum residue limitation) or tolerance exemption. This means that the federal Environmental Protection Agency, in approving a pesticide, must simultaneously assure the safety of the product for use on those food crops for which it is intended. Similarly, a food additive "shall, with respect to any particular use or intended use of such additives, be deemed to be unsafe" 50 absent affirmative approval of a food additive petition by the federal Food and Drug Administration.

Permitting requirements are regulatory tools similar to requirements for prior approval, applied particularly to certain sources of air⁵¹

Federal Insecticide, Fungicide, and Rodenticide Act, 7 USC §§ 136-136y [hereinafter FIFRA].

^{48.} Federal Food, Drug, and Cosmetic Act, 21 USC §§ 301-397 (hereinafter FFDCA).

^{49.} FFDCA § 408(a)(1), 21 USC § 346a(a)(1).

^{50.} Id. § 409(a), 21 USC § 348(a).

^{51.} Clean Air Act, 42 USC § 7401-7671q.

and water⁵² pollution and for hazardous waste facilities.⁵³ All these schemes specify that a regulated entity may not engage in an identified activity—discharge of pollution into the air or water, or treatment, storage or disposal of hazardous wastes, as the case may be—without a permit. A prospective permittee must submit an application to a governmental permitting authority, which then must give its affirmative approval before the regulated activity may commence. Similar requirements apply to the licensing of nuclear power plants.⁵⁴

b. Requirements for Prior Notification

With the exception of identifiable subcategories such as pesticides and hazardous wastes which are regulated under specific statutory mandates, toxic substances in general are not subject to requirements for prior approval under federal legislation in the United States. A notable exception applies to private parties proposing to manufacture a new chemical substance, or proposing to process an existing chemical substance for a significant new use. Those persons must notify the federal Environmental Protection Agency at least 90 days in advance, providing data that the submitter believes demonstrates that the chemical will not present an unreasonable risk.⁵⁵ Although not so aggressive as affirmative advance regulatory approval schemes, notification requirements such as this create a temporal window during which governmental authorities may act in a prophylactic or precautionary manner.

c. Requirements for Prior Study

Prior study is yet another approach that is useful for facilitating public policies stressing prevention and precaution. The principal legislative vehicle in the United States is the *National Environmental Policy Act* (NEPA),⁵⁶ which is the US version of the methodology known internationally as "environmental impact assessment." NEPA establishes requirements for the analysis of the potential effects of anticipated "major Federal actions significantly affecting the quality of the human environment" in a formal document known as an environmental impact statement (EIS). Implementing regulations and a considerable body of case law establish that an EIS must contain the following elements: (1) a

^{52.} Clean Water Act (Federal Water Pollution Control Act), 33 USC §§ 1251-1387.

^{53.} Resource Conservation and Recovery Act, 42 USC §§ 6901-6992k.

^{54.} Atomic Energy Act of 1954, 42 USC §§ 2011-2282.

^{55.} Toxic Substances Control Act, § 5, 15 USC § 2604 (hereinafter TSCA).

^{56.} National Environmental Policy Act of 1969, 42 USC §§ 4321-4370 (hereinafter NEPA).

description of the proposed action; (2) an analysis of the potentially affected environment; (3) a description of the direct and indirect potential impacts on that environment resulting from the proposed action; (4) a consideration of alternatives, including the alternative of no action, and the potential impacts of those alternatives; and (5) an analysis of mitigating measures. Federal agencies are directed to commence consideration of the nature and extent of potential environmental impacts of a proposed activity at an early stage through a process known as "scoping." Many states of the United States have adopted similar enactments, sometimes known as "little NEPAs."

NEPA's mandate for prior study before a proposed action may be undertaken and its public participation requirements, on occasion as enforced through judicial action, have frequently empowered federal agencies to identify and either avoid or mitigate adverse environmental effects at an early stage in the process of project identification and implementation.⁵⁷ One of NEPA's strengths is its across-the-board application to all federal actions and agencies, including those that do not have an affirmative environmental mandate. Consistent with a precautionary perspective, NEPA's implementing regulations specifically direct agencies preparing an EIS to identify and evaluate incomplete or unavailable information.⁵⁸ On the other hand, although the statute requires the identification and analysis of alternatives, it does not require the selection of environmentally preferable options. Moreover, its scope—in contrast to similar requirements in some other countries—is limited to projects that are initiated by or require the approval of public authorities, thereby potentially exempting certain strictly private undertakings from scrutiny under the statute.

2. Substantive Mandates

United States federal legislation includes a wide variety of substantive directives that govern the outcomes of governmental decision-making processes, as distinct from the processes by which those decisions are taken. Some of these formulations are more precautionary than others. This section identifies a number of the tests found in US federal environmental legislation by reference to a precautionary imperative to err on the side of caution in situations characterized by uncertainty.

 ^{57.} Under certain circumstances, NEPA's mandate for prior study and analysis may augment the efficacy of other regulatory tools, such as permitting requirements. See, e.g., *Roosevelt Campobello International Part Commission* v. *EPA*, 684 F.2d 1041 (1st Cir. 1982) (interaction of NEPA, *Clean Water Act*, and *Endangered Species Act*).
 58. 40 CFR § 1502.22 (incomplete or unavailable information).

a. Zero Tolerance

Almost by definition, the most precautionary policies would be those that tolerate absolutely no risk. The so-called "Delaney Clauses," ⁵⁹ which ban the addition of demonstrated cancer-causing food colorings, additives, and animal drugs in any amount to food, are probably the best-known examples of this approach in United States law. The Delaney Clauses, which articulate a "zero risk" threshold generally regarded as the most demanding in federal law, are nonetheless subject to a "de minimis" exception⁶⁰ and have on occasion been criticized on both scientific and policy grounds. ⁶¹ Moreover, there is a certain amount of discretion inherent in the determination whether a substance causes cancer and is therefore subject to the statutory prohibition. The requirement for prior approval of a food additive petition⁶² enhances the precautionary nature of this substantive directive.

Another policy close to a "zero tolerance" philosophy is found in the *Endangered Species Act*, which requires the federal government to assure that each of its actions "is not likely to jeopardize the continued existence" of any listed endangered or threatened species. Although the terms "likely" and "jeopardize" suggest a relative determination based on risk, this passage has been interpreted as a blanket prohibition on federal actions that may harm endangered species. As is the case with NEPA, this portion of the statute is limited to governmentally-sponsored activities and does not in general govern the behavior of private parties.

The *Clean Water Act* articulates a policy goal "that the discharge of pollutants into the navigable waters [of the United States] be eliminated by 1985."⁶⁴ The vigor of this mandate is somewhat attenuated by its identification as a broad-gauge policy goal. Even now, well after the target date of 1985, permits continue to be granted for discharges of pollutants under the substantive portion of the statute.⁶⁵

^{59.} FFDCA §§ 409(c)(3)(A), 512(d)(1)(H) & 721(b)(5)(B), 21 USC §§ 348(c)(3)(A), 360b(d)(1)(H) & 379e(b)(5)(B). Congress recently specified that the first of these provisions no longer applies to pesticide residues in food. *Food Quality Protection Act of 1996*, Pub. L. No. 104-170, 110 Stat. 1489 (1996).

^{60.} See, e.g., Monsanto Co. v. Kennedy, 613 F.2d 947 (DC Cir. 1979).

^{61.} See, e.g., Richard A. Merrill, "FDA's Implementation of the Delaney Clause: Repudiation of Congressional Choice or Reasoned Adaptation to Scientific Progress?", 5 *Yale J. Reg.* 1, 75-76 (1988) ("the large gaps in Delaney's wall favor old additives and disfavor new ones[,]... revealing the law's inequity and documenting its perversity, for newer technologies are often safer than older ones").

^{62.} See section III.A.1.a supra.

^{63.} See, e.g., Tennessee Valley Authority v. Hill, 437 US 153 (1978).

^{64.} Clean Water Act, § 101(a)(1), 33 USC § 1251(a)(1).

^{65.} See section III.A.1.a supra.

b. Health- and Safety-based Criteria

Several US statutory authorities direct federal agencies to act in a precautionary manner by reference to tests designed to protect human health or the environment. The *Clean Air Act* instructs the federal Environmental Protection Agency to establish primary ambient air quality standards for criteria pollutants such as particulates, sulfur dioxide, carbon monoxide, nitrogen oxides, ozone, and lead which, "allowing an adequate margin of safety, are requisite to protect the public health." This language precludes the consideration of economic factors in determining the appropriate requirements. 67

The Occupational Health and Safety Act authorizes regulations limiting workers' exposure to toxic substances that "most adequately assure[], to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity..." ⁶⁸ This language requires the implementing agency, the Occupational Safety and Health Administration (OSHA), to document the presence of a significant risk to justify the need for regulatory intervention, ⁶⁹ but does not require the consideration of cost-benefit balancing. ⁷⁰

As discussed above, US law categorically prohibits the approval of carcinogenic food and color additives. Non-cancer-causing additives must nonetheless be "safe," ⁷¹ a term that appears without qualification in the statutory mandate known as the "general safety clause." "Safe means that there is convincing evidence that establishes with reasonable certainty that no harm will result from the intended use of the color additive." ⁷² Similarly, the Environmental Protection Agency may grant an exemption from the need for a pesticide tolerance (maximum residue limitation) only if "there is a reasonable certainty that no harm will result

^{66.} Clean Air Act, § 109(b)(1), 42 USC § 7409(b)(1). Cf. Ethyl Corp. v. EPA, 541 F.2d 541 F.2d 1, 14 (DC Cir.) (en banc), cert. denied sub nom. E. I. Du Pont de Nemours & Co. v. EPA, 426 US 941 (1976) (noting that risk assessment phase preceding risk management measure "is not a precautionary statute at all" because it "demand[s] a threshold determination that the pollutant causes actual harm").

Whitman v. American Trucking Associations, 531 US 457 (2001); Lead Industries Association v. EPA, 647 F.2d 1130, 1148 (DC Cir. 1980).

^{68.} Occupational Safety and Health Act, § 6(b)(5), 29 USC § 655(b)(5).

^{69.} Industrial Union Department v. American Petroleum Institute, 448 US 607 (1980).

^{70.} American Textile Manufacturers Institute, Inc. v. Donovan, 452 US 490 (1981).

^{71.} FFDCA §§ 409(c)(3)(A) & 721(b)(4), 21 USC §§ 348(c)(3)(A) & 379e(b)(4).

 ²⁰ CFR§ 70.3. This definition was implicitly approved in Simpson v. Young, 854 F.2d 1429 (DC Cir. 1988). Responses to individual color additive petitions under the general safety clause as applied, however, may at least arguably be based on a risk assessment. See, e.g., Scott v. FDA, 728 F.2d 322 (6th Cir. 1984).

from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposure and all other exposure for which there is reliable information,"⁷³ including a determination that "there is a reasonable certainty that no harm will result to infants and children from aggregate exposure to the pesticide chemical residue."⁷⁴

c. Risk-based Tests

Despite the extensive use of risk assessments and the prevalence of risk-based policy making in the Executive Branch and federal agencies, statutory mandates addressing environment, public health, and natural resources include relatively few that expressly require risk assessments by name or contain risk-based tests explicitly identified as such.

As modified by amendments in 1990, section 112 of the *Clean Air Act* is one prominent example. The Environmental Protection Agency is directed to establish technology-based controls on a list of 189 chemicals pursuant to a statutorily-specified schedule. Within eight years after the promulgation of a standard, the Agency must review it to determine whether it provides "an ample margin of safety to protect human health." In the case of carcinogens, revisions to the standards are required to the extent that they "do not reduce lifetime excess cancer risks to the individual most exposed to emissions from a source in the category or subcategory to less than one in one million."

The Food Quality Protection Act of 1996 eliminated the Delaney Clause's zero-tolerance requirement for carcinogenic pesticides in processed foods⁷⁷ and replaced it with a requirement that all pesticide tolerances be "safe," defined as "a reasonable certainty that no harm will result from aggregate exposure to the pesticide... residue, including all anticipated dietary exposures and all other exposures for which there is reliable information." In the case of pesticides for which there is no threshold effect—i.e., for carcinogens—this test is generally regarded as reflecting a one-in-a-million risk as determined by a quantitative risk assessment. The statute expressly requires consideration of particular sensitivity and exposure to pesticides by infants and children and directs EPA to establish an additional safety factor of up to tenfold to ensure that tolerances are safe for infants and children. ⁷⁹

^{73.} FFDCA § 408(c)(2)(A)(ii), 21 USC §§ 346a(c)(2)(A)(ii).

^{74.} *Id.* § 408(b)(2)(C)(ii), 21 USC § 346a(b)(2)(C)(ii).

^{75.} Clean Air Act, § 112(e)(2)(A), 42 USC § 7412(e)(2)(A).

^{76.} *Ibid*.

^{77.} See section III.A.2.a supra.

^{78.} See section III.A.2.b supra.

^{79.} FFDCA § 408(b)(2)(B)(iv), 21 USC §346a(b)(2)(B)(iv).

Another instance of a statutory directive for risk-based decision making is found in the so-called Superfund statute, designed to assure the identification and cleanup of hazardous waste sites. This authority requires the preparation of health assessments to assist in the reduction of exposure to hazardous substances from Superfund sites.⁸⁰

The Safe Drinking Water Act directs the Environmental Protection Agency to establish drinking water regulations designed to protect against "adverse effect[s] on the health of persons."81 In amendments enacted in 1996, Congress recognized that "in considering the appropriate level of regulation for contaminants in drinking water, risk assessment, based on sound and objective science, and benefit-cost analysis are important analytical tools for improving the efficiency and effectiveness of drinking water regulations to protect human health."82

d. Technology-based and Cost-benefit Requirements

A number of US statutes, including those addressing air and water pollution and hazardous waste facilities, make extensive use of technology-based approaches, in which the stated goal of controlling releases or concentrations of a regulated substance are defined, and limited, by the technical capability of specified pollution control systems or production process changes.

Technology-based approaches, whatever else their utility may be, would not ordinarily be considered to articulate a public policy based on precaution. There is no necessary congruence between what may be judged technically achievable and a desirable risk management outcome from a public policy perspective, particularly one that emphasizes anticipation and prevention of harm in the face of uncertainties concerning risks. A precautionary perspective would counsel that if available technologies, or even strongly encouraged developments in technology through the creation of regulatory incentives, are inadequate to reduce risks to the extent considered desirable from other perspectives, then further actions, such as limits on production or specific use, should be available to policy makers.

Risk-benefit balancing is yet another regulatory philosophy that has played a significant role in federal environmental law. The principal

^{80.} Comprehensive Environmental Response, Compensation, and Liability Act of 1980, § 104(i), 42 USC § 9604(i) (response authorities for hazardous waste disposal sites).

^{81. 42} USC § 300g-1(b)(1)(A)(i).

Safe Drinking Water Act, Amendments of 1996, Pub. L. No. 104-182, § 2, 110 Stat. 1614 (1996).

authority governing the approval of pesticides⁸³ and a major statutory enactment on toxic substances both require cost-benefit analyses.⁸⁴

A risk-benefit test might be precautionary as applied to certain situations, such as large risks for which the cost of elimination or reduction is low. As a general matter, however, the balance of costs and benefits does not necessarily correlate with a policy of anticipating and preventing risks. It is not infrequently the case, moreover, that harms to the environment, public health, or natural resources are poorly characterized. Difficulty in evaluating or quantifying the benefits of regulation, defined as risks ameliorated or abated, in valuing those benefits, or in accurately estimating costs of risk reduction may further attenuate the utility of risk-benefit approaches by reference to a precautionary endpoint. There are also significant methodological limitations in monetizing such environmental amenities as visibility, wilderness preservation, or endangered species.

In the case of pesticides, the requirement for prior regulatory approval provides a procedural tool that tends to offset the effect of a substantive mandate that is arguably less than precautionary. However, for toxic substances more generally, as discussed in section III.A.1.b above, there is no analogous requirement. The rigor required for the necessary finding of "unreasonable risk" prior to regulation under the *Toxic Substances Control Act*,85 defined by reference to a risk-benefit balancing approach in a statute that contains no requirement for prior governmental approval of toxic substances, has arguably limited the law's effectiveness as a precautionary instrument of public policy.86

B. Judicial Decisions

Precautionary precepts have also been articulated by federal courts in the United States, primarily in interpreting statutory authorities of the kind described in section III.A above to lawsuits seeking to set

^{83.} FIFRA § 3(c)(5), 7 USC § 136a(c)(5). See *Save Our Ecosystems* v. *Clark*, 747 F.2d 1240, 1248 (9th Cir. 1984) ("FIFRA registration is a cost-benefit analysis that no unreasonable risk exists to man or the environment taking into account the economic, social and environmental costs and benefits of the use of any pesticide.")

^{84.} TSCA § 6, 15 USC § 2605 ("unreasonable risk" as test for regulation by reference to cost-benefit analysis).

^{85. 15} USC §§ 2601-29.

^{86.} See, e.g., *Corrosion Proof Fittings* v. *EPA*, 947 F.2d 1201, 1214, 1230 (5th Cir. 1991) (setting aside EPA's final rule banning the manufacture, importation, processing, and distribution in commerce of most asbestos-containing products, promulgated under authority of *Toxic Substances Control Act*, despite ten years of agency work on regulation and hundreds of studies on the effects of asbestos).

aside specific agency actions, such as regulations. With one exception, all the judicial opinions in this section were rendered in cases seeking judicial review of administrative action, a legal institution whose purpose is to provides a private party with an opportunity to contest the legality or adequacy of governmental action implementing a regulatory statute through a comparison of official conduct in a particular case with specified legal mandates.

To that extent, suits seeking judicial review of agency action create an opportunity for citizens, corporations, non-profit organizations, and other private actors to challenge the legality of governmental action through appeals to a neutral third party, namely a court. Accordingly, the institution of judicial review is frequently viewed as important source of legitimacy in US administrative law. In evaluating the legality of the challenged action—which in the environmental field is frequently a regulation or rule promulgated by an administrative agency—the reviewing court will typically apply a legal test of statutory origin. The principal, although not the only, sources of such criteria are substantive environmental laws, some of which are summarized above. Consequently, judicial opinions in suits seeking judicial review contain interpretations of statutory authorities and analyses of the extent to which the agency's action which is challenged complies with the statutory test as interpreted by the court.

Cases involving precautionary decision making usually involve the processing of some underlying data, often of a scientific nature, by a technically expert agency. The agency's conclusions resulting from analysis of those data are reflected in the challenged action, such as an environmental regulation. One basic principle of US administrative law asserts that an agency must identify the data on which it relied and explain the reasoning by which the agency proceeded from that data set to its action.⁸⁷ Another fundamental principle of administrative law involves the concept of "standard of review," with scientific determinations customarily receiving a high level of deference.⁸⁸

Because the mandate for precaution (or not, as the case may be) comes from the statutory authority concerned, it is most useful to group and analyze the cases by statute. That is, a substance might be treated differently under one statute governing air emissions from under a dif-

^{87.} E.g., United States v. Nova Scotia Food Products, 568 F.2d 240 (2d Cir. 1977).

^{88.} See, e.g., Baltimore Gas & Electric Co. v. Natural Resources Defense Council, 462 US 87, 103 (1983) ("a reviewing court must remember that the [expert administrative agency] is making predictions, within its area of expertise, at the frontiers of science. When examining this kind of scientific determination, as opposed to simple findings of fact, a reviewing court must generally be at its most deferential.")

ferent statute governing pollution of waterways by the same substance. This section describes and analyzes federal cases often relied upon under the rubric of precaution in the United States.

1. The Ethyl Case

The clearest and most frequently cited case articulating a precautionary philosophy toward regulatory action is *Ethyl Corp.* v. *EPA*,89 which dealt with the question of lead in gasoline. At issue in this case were regulations promulgated by the federal Environmental Protection Agency requiring a scheduled phasedown in the lead content of leaded gasoline. The statute required the Agency to demonstrate that the additive, tetraethyl lead, "will endanger the public health or welfare"90 before regulating it. The Agency had relied on a number of studies that suggested, but did not conclusively prove, the deleterious character of lead originating from gasoline, particularly to children. The lead additive manufacturers who challenged the regulation claimed that the Agency lacked proof of actual harm and that the regulation was therefore legally defective by reference to the "will endanger" test.

In reviewing the regulation, the United States Court of Appeals for the District of Columbia Circuit concluded that the threshold for action did not require a demonstration of actual harm. The court emphasized that the concept of "endanger" relates to threats and implies no necessity for a finding of actual harm. Accordingly, the court approved the Agency's interpretation of the "will endanger" mandate to mean "presents a significant risk of harm." ⁹¹ The court also observed that "the magnitude of risk sufficient to justify regulation is inversely proportional to the harm to be avoided." ⁹²

With respect to the question of scientific uncertainty and the potentially disparate inferences that could be drawn from the data on which the Agency relied, the court opined as follows:

Questions involving the environment are particularly prone to uncertainty. Technological man has altered his world in ways never before experienced or anticipated. The health effects of such alterations are often unknown, sometimes unknowable. While a concerned Congress has passed legislation providing for protection of the public health against

 ⁵⁴¹ F.2d 1 (DC Cir.) (en banc), cert. denied sub nom. E. I. Du Pont de Nemours & Co. v. EPA, 426 US 941 (1976).

^{90.} Clean Air Act, § 211(c)(1)(A), 42 USC § 1857f-6c(c)(1)(A).

^{91. 541} F.2d at 13.

^{92.} Id. at 19.

gross environmental modifications, the regulators entrusted with the enforcement of such laws have not thereby been endowed with a prescience that removes all doubt from their decision making. Rather, speculation, conflicts in evidence, and theoretical extrapolation typify their every action. How else can they act, given a mandate to protect the public health but only a slight or nonexistent database upon which to draw?... Sometimes, of course, relatively certain proof of danger or harm... can be readily found. But, more commonly, "reasonable medical concerns" and theory long precede certainty. Yet the statutes—and common sense—demand regulatory action to prevent harm, even if the regulator is less than certain that harm is otherwise inevitable.

Undoubtedly, certainty is the scientific ideal—to the extent that even science can be certain of its truth. But certainty in the complexities of environmental medicine may be achievable only after the fact, when scientists have the opportunity for leisurely and isolated scrutiny of an entire mechanism. Awaiting certainty will often allow for only reactive, not preventive, regulation.⁹³

In the most frequently quoted language in the opinion, the court summarized as follows:

Where a statute is precautionary in nature, the evidence difficult to come by, uncertain, or conflicting because it is on the frontiers of scientific knowledge, the regulations designed to protect the public health, and the decision that of an expert administrator, we will not demand rigorous step-by-step proof of cause and effect. Such proof may be impossible to obtain if the precautionary purpose of the statute is to be served.⁹⁴

2. OSHA Cases

The question of the federal government's capacity to employ precautionary approaches to governmental decision making has arisen a number of times in cases decided under the *Occupational Safety and Health Act*'s (OSHA's) provisions that apply to toxic substances in the workplace. The statutory standard, as set out in section III.A.2.b above, requires that permissible exposure limits (PELs) promulgated under the statute be those that "most adequately assure[], to the extent feasible, on the basis of the best available evidence, that no employee will suffer material impairment of health or functional capacity..." ⁹⁵ Like the *Ethyl* case, interpreting a different statutory test, the judicial opinions interpreting this provision have tended to emphasize that the intent of the

^{93.} Id. at 24-25 (footnotes omitted).

^{94.} Id. at 28 (footnotes omitted).

^{95.} Occupational Safety and Health Act, § 6(b)(5), 29 USC § 655(b)(5).

legislation is to protect against risks to workers, and that to demand a rigorous demonstration of cause and effect would be contrary to that prophylactic purpose.

In a leading case interpreting this provision of OSHA as applied to a PEL limiting worker exposure to asbestos fibers, the DC Circuit observed that

...some of the questions involved in the promulgation of these standards are on the frontiers of scientific knowledge, and consequently as to them insufficient data is presently available to make a fully informed factual determination. Decision making must in that circumstance depend to a greater extent upon policy judgments and less upon purely factual analysis. Thus, in addition to currently unresolved factual issues, the formulation of standards involves choices that by their nature require basic policy determinations rather than resolution of factual controversies. 96

In a footnote, the court went on to state that

Where existing methodology or research in a new area of regulation is deficient, the agency necessarily enjoys broad discretion to attempt to formulate a solution to the best of its ability on the basis of available information. 97

In a challenge to a PEL for vinyl chloride, a carcinogen, the United States Court of Appeals for the Second Circuit also adopted this interpretation of the statute, citing these passages in the earlier case with approval. A challenge to a standard for lead in the workplace prompted the DC Circuit to reaffirm its earlier interpretations, restating that "in an area of scientific uncertainty [OSHA] has broad discretion to form the best *possible* solution." 99

In a case involving review of a standard for ethylene oxide, which the expert agency had concluded presents a significant risk of cancer in humans, the DC Circuit elaborated its earlier views, opining that

While some of OSHA's evidence suffers from shortcomings, such incomplete proof is inevitable when the Agency regulates on the frontiers of scientific knowledge...

^{96.} Industrial Union Department v. Hodgson, 499 F.2d 467, 474 (DC Cir. 1974).

^{97.} Id. at 474 n. 18.

Society of the Plastics Industry, Inc. v. Occupational Safety and Health Administration, 509 F.2d 1301, 1304, 1308 (2d Cir.), cert. denied sub nom. Firestone Plastics Co. v. Department of Labor, 421 US 992 (1975).

^{99.} United Steelworkers of America v. Marshall, 647 F.2d 1189, 1259 (DC Cir. 1980), cert. denied sub nom. Lead Industries Association v. Donovan, 453 US 913 (1981) (emphasis in original).

The scientific evidence in the instant case is incomplete but what evidence we have paints a striking portrait of serious danger to workers exposed to the chemical. When the evidence can be reasonably interpreted as supporting the need for regulation, we must affirm the agency's conclusion, despite the fact that the same evidence is susceptible of another interpretation. 100

In a later passage, the court observed that "requiring strict proof would fatally cripple all of OSHA's regulatory efforts." ¹⁰¹

3. Testing of Chemicals

As discussed in section III.A.2.d above, section 6 of the *Toxic Substances Control Act* (TSCA)¹⁰² authorizes the Environmental Protection Agency (EPA) to promulgate regulations ranging from labeling to total bans for a chemical that "presents or will present an unreasonable risk of injury to health or the environment," a formulation which implies the need for a cost-benefit analysis. Section 4 of the statute sets out a framework for EPA to require testing of suspect chemicals that "*may* present an unreasonable risk of injury to health or the environment." ¹⁰³

In cases in which industry interests challenged regulations requiring testing of 2-ethylhexanoic acid¹⁰⁴ and certain fluoroalkenes,¹⁰⁵ two federal courts of appeal have held that the statutory formulations "present or will present an unreasonable risk" on the one hand and "may present an unreasonable risk" on the other have different meanings, related to the statutory purpose. In particular, the threshold of scientific certainty for testing chemicals is lower than that for a substantive regulation, such as a production limitation. This interpretation is consistent with the statutory purpose and structure, which is designed to identify a universe of chemicals about which additional information is required—those that "may present" an unreasonable risk—to determine which of those substances require regulation, based on test data and other information that show which of those tested "present[] or will present an unreasonable risk."

At a higher level of generality, these judicial opinions address the relationship between the threshold for action and an appropriate public policy response. A low or relaxed threshold for action is arguably appro-

^{100.} Public Citizen Health Research Group v. Tyson, 796 F.2d 1479, 1495 (DC Cir. 1986).

^{101.} Id. at 1499.

^{102. 15} USC § 2605(a).

^{103. 15} USC § 2603(a)(1)(A)(i) (emphasis supplied).

^{104.} Chemical Manufacturers Association v. EPA, 859 F.2d 977 (DC Cir. 1988).

^{105.} Ausimont USA., Inc. v. EPA, 838 F.2d 93 (3d Cir. 1988).

priate if the risk management strategy is the collection of additional information, as in the TSCA section 4 test rule cases.

4. Reserve Mining Co. v. EPA

Reserve Mining Co. v. EPA¹⁰⁶ is often mentioned in tandem with the Ethyl opinion as a leading case on the interpretation and application of precaution in US environmental jurisprudence. Reserve Mining was a situation in which a particular company was discharging taconite tailings containing asbestiform fibers similar to those regulated by OSHA, as described above, because of their capacity to cause disease in occupational settings. It was, however, uncertain whether discharges into water and the ambient air presented similar risks.

In affirming the trial court's award of an injunction after a finding that the air and water discharges "substantially endanger[]" the local population, the United States Court of Appeals for the Eighth Circuit observed as follows:

...the medical and scientific conclusions here in dispute clearly lie "on the frontiers of scientific knowledge." ...The trial court, not having any proof of actual harm, was faced with a consideration of 1) the probabilities of any health harm and 2) the consequences, if any, should the harm actually occur....

These concepts of potential harm, whether they be assessed as "probabilities and consequences" or "risk and harm," necessarily must apply in a determination of whether any relief should be given in cases of this kind in which proof with certainty is impossible. The district court, although not following a precise probabilities-consequences analysis, did consider the medical and scientific evidence bearing on both the probability of harm and the consequences should the hypothesis advanced by the plaintiffs prove to be valid.

In assessing probabilities in this case, it cannot be said that the probability of harm is more likely than not. Moreover, the level of probability does not readily convert into a prediction of consequences. On this record it cannot be forecast that the rates of cancer will increase from drinking Lake Superior water or breathing Silver Bay air. The best that can be said is that the existence of this asbestos contaminant in air and water gives rise to a reasonable medical concern for the public health. The public's exposure to asbestos fibers in air and water creates some health risk. Such a contaminant should be removed.

...the existence of this risk to the public justifies an injunction decree requiring abatement of the health hazard on reasonable terms as a precautionary and preventive measure to protect the public health. 107

Reserve Mining differs from all the other cases cited in this paper in that it was an enforcement action against a particular firm initiated by the federal government, several states of the United States, and a number of environmental groups. Because it was not a suit for judicial review, the court of appeals in Reserve Mining concluded that the trial court had both identified a suitably precautionary perspective and that the judicial authority had directly applied that test appropriately to the evidence, absent prior evaluation by a regulatory agency. By contrast, in a suit for judicial review, the reviewing court articulates the legal standard, as to which the courts as a general matter have the final word, and evaluates the application of that standard to the factual data set identified by the agency. With respect to this second step, the courts are guided by standards of review involving deference to the expert agency's presumptively appropriate analysis of the underlying scientific data set.

It is also worthwhile to note that all the cases cited here are ones in which an agency—or, in the case of Reserve Mining, a lower court—has taken the initiative to act in a proactive and precautionary manner. It does not necessarily follow that, if the agency (or the lower court, as the case may be) had decided to refrain from acting, the reviewing court would necessarily have compelled or ordered precautionary action when presented with an analysis of conflicting evidence supporting inaction as opposed to action. 108

IV. EXAMPLES OF US STATE AND LOCAL INITIATIVES

In a federal system such as that of the United States, not only the federal government, but also sub-national governmental units, may have legislative authority. The exercise of this authority can, on occasion, provide useful insights into precautionary approaches that may augment or supplement federal initiatives. Precautionary legislation in the United States has been enacted not only at the federal level, but also by subnational units within the US federal system—by the quasi-sovereign constituent states, as well as by local municipalities. This section describes two examples of each.

^{107.} Id. at 519-20.

^{108.} Additionally, a court may set aside precautionary agency action if not authorized by the relevant statutory authority. See, e.g., *Corrosion Proof Fittings, supra*, note 86 (setting aside arguably precautionary ban on most asbestos-containing products as exceeding statutory authority under *Toxic Substances Control Act*).

A. California Proposition 65

California's Proposition 65,109 approved by voter referendum in that state in 1986, prohibits the discharge into sources of drinking water of any chemical that is a carcinogen or reproductive toxin except in amounts that the discharger can demonstrate "will not cause any significant amount of the discharged or released chemical to enter any source of drinking water." This aspect of the statute is a discharge limitation, together with a burden-shifting component that places the onus on the discharger to demonstrate the absence of significant exposure. Second, the statute prohibits exposing the public to carcinogens or reproductive toxins, as in consumer products or food, without warning unless the risk of a lifetime of exposure is insignificant. This requirement relies upon a risk management theory based on risk communication, but again with a presumption that labels are required unless demonstrated to be unnecessary.

The burden-shifting requirements of Proposition 65 can be regarded as a precautionary approach to regulation because they require the entity creating an exposure to demonstrate the absence of an adverse consequence. The statute also demonstrates the variety of risk management strategies to which precaution can be applied, including risk communication, which is generally regarded as among the less intrusive and least burdensome forms of regulation. Perhaps not coincidentally, the statute has generally been considered a success story, in particular because its burden-shifting has created an incentive for industry to support the promulgation of regulations, in the absence of which the presumption of the statute's application would apply. Further, because of the "California effect" resulting from the size of the market in that state, Proposition 65 has had a nationwide impact on manufacturers that have had an incentive to reformulate all their products to avoid the labeling requirements in California.

B. Massachusetts Toxic Use Reduction Act

The Massachusetts *Toxic Use Reduction Act of 1989* (TURA)¹¹⁰ is another effort at implementing precautionary perspectives at the state level. The overall strategy is one of pollution prevention focused on the use of toxic chemicals and the generation of wastes in the manufacturing

Safe Drinking Water and Toxic Enforcement Act of 1986, Cal. Health & Safety Code §§ 25249.5-25249.13.

^{110.} Mass. Gen. L., ch. 21I, §§ 1-23.

process. The statute does not regulate based on risk or "safe" levels of exposure or emission, but instead encourages reductions in use.

TURA identifies a statewide goal of reducing toxic waste generated by fifty per cent by the year 1997, through a toxics use reduction strategy as the preferred means for compliance with state and federal laws governing toxics production and use, hazardous waste, industrial hygiene, worker safety, public exposure to toxics, or releases of toxics into the environment and for minimizing the risks associated with the use of toxic or hazardous substances and the production of toxic or hazardous substances or hazardous wastes. The law requires businesses in Massachusetts which manufacture or use more than 25,000 pounds, or otherwise use more than 10,000 pounds annually, of about 1400 industrial chemicals to prepare a Toxics Use Reduction Plan every two years.

These plans examine the ways in which toxics are utilized in the facility and must include an assessment of alternatives, including such toxics-use reduction strategies as input substitution, product reformulation, production unit redesign or modification, production unit modernization, improved operation and maintenance, and recycling, reuse, or extended use of toxics. In contrast to federal reporting requirements, which are based on releases, firms governed by the Act must also report the quantities of toxic chemicals used, generated as waste, and shipped in and out as product. The reports, which are annually filed by about 500 firms, are publicly available.

Adjusted for changes in production during that period, firms governed by the statute decreased their toxic chemical use by 33 % between 1990 and 1997, generated 48 % less byproduct or waste per unit of product, and reduced releases of reportable chemicals by 83 %. Quantities of chemicals shipped in product showed a production-adjusted reduction of 23 % between 1990 and 1997.¹¹¹

New Jersey's Pollution Prevention Act¹¹² and its implementing regulations¹¹³ establish a program similar to that of Massachusetts, consisting of the development of plans and the submission of reports by individual facilities.¹¹⁴

See Toxics Use Reduction Institute, Success Stories (available at web site http://www.turi.org/turadata/Success/ResultsToDate.html).

^{112.} NJ Stat. Ann., §§ 13:1B-1 et seq.

^{113.} NJ Admin. Code tit. 7, §§ 1K-1.1 to 12.11 (available at web site http://www.state.nj.us/dep/opppc/docforms/document.htm).

^{114.} See generally New Jersey Technical Assistance Program for Industrial Pollution Prevention, *The New Jersey Pollution Prevention Act* (available at web site http://www.cees.njit.edu/njtap/njppa.htm).

C. Bay Area Dioxin Phaseout

Several municipal governments in the San Francisco Bay area—the cities of San Francisco, Oakland, and Berkeley, and Marin County—have coordinated actions over the past two years with the goal of eliminating dioxin emissions. These resolutions have given rise to an initiative under the auspices of the Association of Bay Area Governments (ABAG) to develop a menu of dioxin pollution reduction projects from which local governments can select to reduce their contributions to dioxin loadings. A consultant was hired to elaborate these options, resulting in a report which has been made available for public comment and is now awaiting revision and finalization. There is some possibility that this initiative will lead to a binding ordinance adopted by the city of San Francisco requiring specified actions with respect to dioxins.

D. Los Angeles School District Integrated Pest Management Program

The Los Angeles Unified School District has adopted an integrated pest management (IPM) program that is expressly based on a theory of precaution. The policy states that "no pesticide product is free from risk or threat to human health." The program "give[s] non-chemical methods first consideration when selecting appropriate pest control techniques" and "strive[s] to ultimately eliminate the use of all chemical controls."

The program establishes a Pest Management Team, consisting of 15 members, including two parents of students in the system, two community members, two environmental representatives, one teacher, and a medical practitioner. The Pest Management Team is directed to review and approve pesticide product use. The program also provides for a professional IPM coordinator. 117

^{115.} The resolution adopted by the San Francisco Commission on the Environment is available at web site http://www.sfgov.org/sfenvcomm/resolutions/021-98. htm>).

^{116.} Screening Evaluation of Dioxins Pollution Prevention Options (draft available at web site http://dioxin.abag.ca.gov/pdf/ReportText.pdf).

^{117.} A description of the program does not appear to be posted on the Internet. An overview of pest management policies, programs, and practices in California can be found at http://www.cdpr.ca.gov/docs/dprdocs/schools/text.htm.