# CANADA/UNITED STATES

# MEMORANDUM OF INTENT

# ON

# TRANSBOUNDARY AIR POLLUTION

## Report of

## Legal, Institutional and Drafting Work Group

## (Work Group 4)

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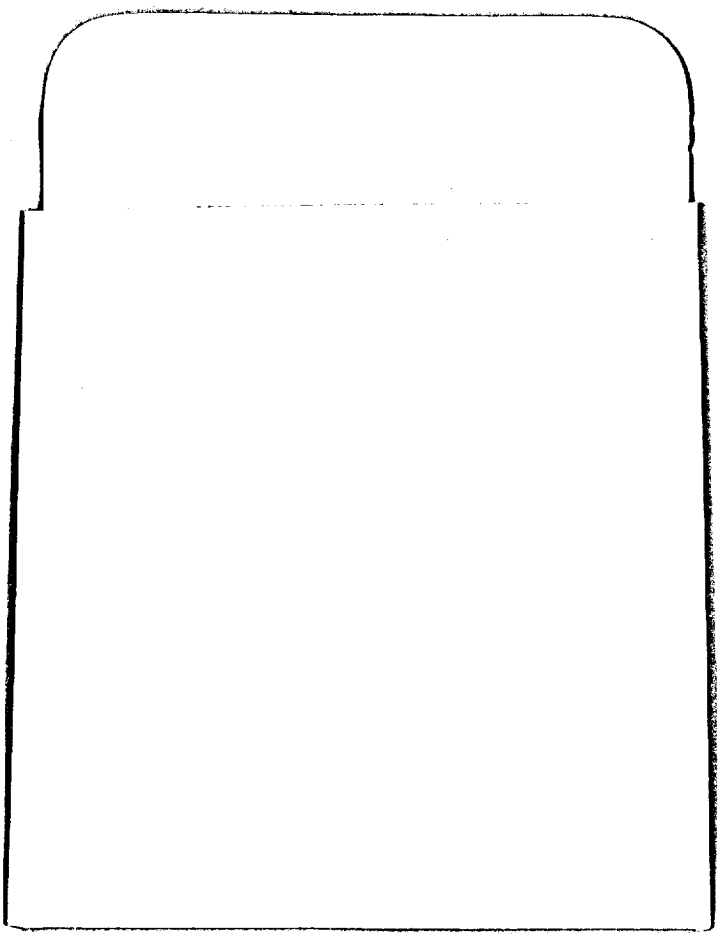

## Preface: Nature of this Report

This Report has been prepared by the bilateral Legal, Institutional and Drafting Work Group IV, established under the Memorandum of Intent signed by the United States and Canada on August 5, 1980.

The Report represents an initial effort to draw together available information on international and domestic legal matters which may pertain to the negotiation of a cooperative agreement to deal with transboundary air pollution. Other Work Groups are responsible for preparing reports on the scientific, technical and control strategy aspects of the problem.

The Report is being provided to the U.S.-Canada Coordinating Committee to facilitate the scheduled commencement of negotiations in June, 1981.

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# I. INTRODUCTION

This Report provides an overview of the current status of international and domestic law and practice with application to transboundary air pollution between the United States and Canada.

The August 1980 Memorandum of Intent signed by the United States and Canada set up the current approach for addressing the problem of transboundary air pollution between the two countries. It was preceded by a July 1979 Joint Statement by both Governments which outlines the existing basis of international obligation, commitment and cooperative practice on which to address problems in this area. An overview of applicable multilateral principles and practices is contained in Chapter III. An overview of existing bilateral obligations and their implementation is contained in Chapter IV.

The Memorandum of Intent expresses the commitment of both Governments to negotiate a cooperative agreement on transboundary air pollution and, pending its conclusion, to take interim measures available under existing authority. An overview of current domestic authorities in the field of air pollution in both countries is contained in Chapter V.

## II. Executive Summary

This Report is intended to provide the Coordinating Committee with a general description of the state of international and domestic law and practice relating to transboundary air pollution. It is not exhaustive of all aspects of this field, nor does it attempt to analyze from a legal perspective the current air pollution problems between the United States and Canada. Rather it is a drawing together of basic information which may be of assistance in commencing the negotiation of the transboundary air pollution agreement called for in the August 1980 Memorandum of Intent.

Air pollution is a relatively new international problem, and international environmental law is still in the process of development. There is nonetheless an important body of international law and practice which relates to the basic responsibility of States to prevent significant transboundary pollution damage, and to procedures for avoiding potential environmental problems. Some of this specifically concerns air pollution; other aspects are broader in nature.

The bilateral basis for addressing environmental issues is generally much firmer because of the long experience shared by the United States and Canada in dealing effectively with pollution problems. Central to the two countries' ability to manage such issues has been active implementation of the 1909 Boundary Waters Treaty. This establishes the fundamental obligation of each country not to pollute boundary waters or waters flowing across the boundary to the injury of health or property on the other side, and sets in place an agreed system for resolving water related problems. In addition, the two countries have become firmly committed to the practice of advance notification and consultation on activities having potential transboundary impact. They have also made active use of bilateral institutions to promote common understanding and agreed solutions. Some specific commitments by the two Governments to begin dealing with air pollution were advanced in the 1978 Great Lakes Water Quality Agreement. The 1979 Joint Statement and the 1980 Memorandum of Intent constitute the most recent expressions of the two countries' commitments to further develop the means of preventing and reducing transboundary air pollution.

Domestic environmental legislation in both countries is relevant to transboundary air pollution because it establishes the legal authority now available to control air pollution, and because it can be expected to affect the manner in which commitments undertaken in an eventual agree-

ment are implemented. An outline of currently existing law in each country is therefore provided in response to a request from the Coordinating Committee.

There are both differences and similarities in the way in which the two countries have approached air pollution control. The differences relate primarily to general matters of constitutional structure and of legal philosophy and style, as well as the different nature of the major polluting sources in each country. The major similarity is that while both sets of legislation contain provisions for dealing with transboundary pollution, most existing legislation in the United States and Canada has been designed primarily to deal with the local impact of air pollution, rather than the interjurisdictional questions now being presented by the transport of air pollutants over long distances.

The main United States domestic legislation for addressing air pollution is the Clean Air Act, currently under review by the Congress. The major domestic instrument of the Canadian Government is its Clean Air Act, which was recently amended. Also relevant is legislation of the various provinces. In addition, both states and provinces play a significant role in implementation of air pollution legislation in the two countries.

## III. Multilateral Principles and Practices

United States and Canadian approaches to bilateral environmental problems have evolved against a background of principles and practices developed multilaterally in a variety of fora. These range from clearly established elements of international law to practices recommended by international organizations.

The established principle of notification and consultation involves countries informing each other in advance of actions which involve a serious risk of causing transboundary pollution, providing sufficient information for the other country to assess their implications, and allowing sufficient time for consultations before the activity begins. In this way adjoining countries are able to make sure they are carrying out their activities so as not to cause serious environmental injury to their neighbours. The practice also assists in avoiding disputes by ensuring that each country is aware of the intentions of the other, and by reducing the likelihood of "surprises" which can exacerbate bilateral problems. Commitment to this principle may be taken as a given in relations between the United States and Canada in environmental matters.

The area of general agreement on the content of international law relative to responsibility and liability is less broad. The principal case cited for the proposition that States are responsible and liable for significant harm done to the environment beyond their borders is the U.S.-Canadian Trail Smelter Arbitration of the 1930's. At the conclusion of that case, in which Canada had previously stipulated its liability for damage caused in the State of Washington by fumes from a smelter in British Columbia, the Arbitral Tribunal stated in dictum that:

> "... under the principles of international law, as well as of the law of the United States no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties of persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence."

The International Court of Justice has dealt with the general question of State responsibility for actions with effects outside their territory in the Corfu Channel Case (1947), in which Albania was found internationally liable for the damage done to a British vessel in passage through a channel newly laid with Albanian mines, the presence of which had not been notified. (Albania rejected the Court's finding). The Court said that every State has

an obligation "not to allow knowingly its territory to be used for acts contrary to the rights of other States."

In June, 1972, the UN Conference on the Human Environment adopted the Stockholm Declaration, Principle 21 of which provides:

> "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or areas beyond the limits of national jurisdiction."

Principle 21 obviously demonstrates a certain degree of internal tension. The reference to a sovereign right to exploit resources is contrasted with a responsibility -- which may limit that right -- to ensure that such activities do not cause damage to the environment beyond national borders. The effect of the juxtaposition of these elements is to suggest that some rule of reason must be applied, without offering guidance on how the two elements of Principle 21 are to be balanced. Nevertheless, Principle 21 is significant in that it reflects general consensus that States bear a certain legal responsibility for the protection of foreign environments.

More recently, the member countries of the OECD, including the United States and Canada, adopted a Recommendation on Principles Concerning Transfrontier Pollution and the subsequent Recommendation Relating to the Implementation of a Regime of Equal Rights of Access and Non-Discrimination in Relation to Transfrontier Pollution. Although they do not constitute international law on the matter, the recommendations state important elements which OECD countries believe should guide their conduct. The former recognizes the existence of transfrontier pollution problems and proposes specific measures both of a domestic and of a state-to-state nature for the protection and improvement of the environment. The latter focuses largely on procedural and other measures which would ensure that the citizens of an affected country are treated no less favourably than they would be under the laws of the country in which the pollution originates. The recommendations are not intended as a substitute for implementation of substantive state-to-state responsibilities relative to prevention of transboundary pollution damage, which has been the traditional focus of environmental relations between states, including the United States and Canada.

## IV. Bilateral Obligations and Their Implementation

Introduction. The United States and Canada have a large body of bilateral obligation, commitment and cooperative practice in the management and resolution of transboundary environmental problems. Generally speaking, the essentially "closed" nature of North American environmental problems has allowed them to be effectively resolved by the two countries. Canada and the United States traditionally have taken a largely similar view towards the importance of dealing responsibly with such problems and have a shared interest in environmental protection compelled by many shared resources. Environmental problems have had their source on both sides of the border and have caused both countries to develop a comparable interest in seeking solutions. The record in resolving such questions over the years has generally been good.

Boundary Waters Treaty. Central to the success of the two countries in managing such problems is the large extent to which the means for dealing with them, and the content of their mutual obligations, have been systematized and agreed upon. The cornerstone of Canada/United States environmental relations is the 1909 Boundary Waters Treaty, which establishes certain basic obligations between the two countries for managing shared water resources. While a number of obligations are set out in the treaty, Article IV is directly relevant to pollution issues. It provides that:

> "boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other."

Much of the environmental relationship has centered on the efforts of both countries to meet this basic mutual obligation.

The treaty also establishes an institutional means for giving effect to these obligations through the creation of the International Joint Commission; the IJC has also been charged with certain responsibilities relating to transboundary air quality problems. It is noteworthy that the fundamental commitment of both countries to the provisions of the treaty and to bilateral cooperation as the accepted means of resolving problems has made it unnecessary to utilize the provision in the treaty providing for arbitration procedures; indeed the two countries have only very occasionally resorted to arbitration in their bilateral environmental relations (as in the Trail Smelter and Gut Dam cases).

Great Lakes Water Quality Agreement. Another major agreement in which the United States and Canada made

provision for addressing air pollution problems was the 1978 Great Lakes Water Quality Agreement, which contains a commitment by both governments to develop and implement programs to identify the sources of airborne pollutants entering the Great Lakes basin. Where these are significant, the Governments have agreed to consult on remedial measures.

Joint Statement. The first formal expression of the commitment of the two Governments to prevent and reduce transboundary air pollution is found in the Joint Statement on Transboundary Air Quality issued on July 26, 1979, which outlines the basis of "obligation, commitment and cooperative practices in existing environmental relations between Canada and the United States" and sets out principles and practices to be addressed in the development of a bilateral agreement on transboundary air quality. The first of these principles is: "Prevention and reduction of transboundary air pollution which results in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems, and impair or interfere with amenities and other legitimate uses of the environment."

Memorandum of Intent. From the general undertakings contained in the 1979 Joint Statement the two Governments proceeded to the Memorandum of Intent (MOI) on Transboundary Air Pollution signed by the two Governments on August 5, 1980. The MOI recognizes the importance and urgency of the problem, and goes on to set out in specific terms a framework and time for beginning negotiations on a bilateral transboundary air pollution agreement. The MOI also expresses both Governments' intentions to take interim actions available under current authority to combat transboundary air pollution. These deal with control measures, notification and consultation, and scientific information, research and development.

Notification and Consultation. Cooperation between the two Governments has not been limited to formal expressions of agreement, but has also been reflected in their actual practice over the years. Notification and consultation are carried out by the two Governments through the Department of State and the Department of External Affairs, who rely on information provided by agencies and jurisdictions in both countries. It can also be supplemented by a more informal exchange of information at the agency-to-agency or regional levels.

In general the focus of bilateral practice is on providing advance information adequate to enable the recipient country to determine what impact the activity may

have. The burden is then on the recipient country to call for consultation if a significant impact appears to be involved. No generally applicable fixed procedures for notification and consultation have been developed, in large part because of the great number and varied nature of the activities to which the principle potentially applies. Such specific matters as the timing of initial notification and the length of time available for consultation have tended to vary with the circumstances.

Traditionally the practice of notification and consultation has been applied primarily to single pollution point sources located near the international boundary. As recognized in the MOI, the problem of transboundary air pollution, involving the flow of air pollutants originating many miles distant from the border, requires that the practice cover a wider geographic area and range of activities.

Effective implementation of the practice also depends in the first instance on recognition of the potential environmental impact which a particular action can have on another country. In this respect notification and consultation are closely related to the allied practice of examining the environmental impact of an activity before it is authorized. Both the United States and Canada have developed domestic procedures for assessing the environmental impact of various activities. The two countries have also in some circumstances undertaken joint or coordinated studies of environmental impacts either bilaterally or under the aegis of the International Joint Commission.

Institutional Arrangements. The United States and Canada have traditionally made strong use of bilateral institutions to assist in managing their environmental problems. It is anticipated that institutional arrangements of some kind will be required to assist in giving effect to an agreement on transboundary air pollution. The particular nature of the institutional arrangements to be required in an agreement can be expected to flow from the specifics of the substantive undertakings which come out of the negotiation process. The following is a description of certain existing institutional arrangements between the two countries potentially relevant to transboundary air pollution.

The first bilateral institution with an environmental mandate to be established was the International Joint Commission (IJC) which was created pursuant to the 1909 Boundary Waters Treaty to assist in its implementation. The IJC is a standing binational body which, over seventy years, has developed a reputation for

thoroughness and impartiality. Perhaps its most important role in environmental protection is that of fact-finder and adviser to the two Governments under Article IX of the treaty, which permits the Governments to refer jointly many transboundary environmental problems for investigation and non-binding recommendation by the Commission.

The Commission's basic mandate under the Treaty concerns water-related problems. Because of its environmental responsibilities in the boundary area, the Governments in 1966 submitted a Reference to the IJC requesting it to inform them of transboundary air pollution problems which might come to the Commission's attention.

A United States/Canada Air Pollution Advisory Board, composed of technical personnel, was established to assist the Commission in this regard. The Commission also oversees implementation of the (1975) Michigan/Ontario Air Pollution Agreement, with the assistance of a Michigan/ Ontario Air Pollution Board. In addition, as noted above, the Commission is concerned with air pollution in the Great Lakes basin pursuant to its responsibilities for assisting in the implementation of the 1978 Great Lakes Water Quality Agreement.

The role which the Commission plays under the Great Lakes Water Quality Agreement is illustrative of the role which a bilateral institution can play in assisting Governments to implement a pollution abatement agreement. Under the Agreement the Commission's responsibilities include the collection and dissemination of information on the condition of Great Lakes waters and on the effectiveness of measures taken by the Governments to meet their commitments, provision of advice and recommendations to the two federal and state and provincial governments on matters relating to the Agreement, and assistance in the coordination of joint activities. The Commission is required to make a full report at least every two years and may make special reports at any time. The Commission is assisted in carrying out its responsibilities by a Water Quality Board and a Science Advisory Board, as well as a regional office.

Finally, arrangements for dealing specifically with transboundary air pollution through a Work Group framework were established by the 1980 Memorandum of Intent to assist the two Governments in preparing for negotiation of a transboundary air pollution agreement. Generally speaking, the Work Group formula is patterned on a similar structure which served both countries well in the development of the 1972 Great Lakes Water Quality Agreement, the precursor of the 1978 Agreement. The other bilateral

arrangement for looking into transboundary air pollution is the bilateral Research Consultation Group (RCG). Established by the United States and Canadian Governments in 1978, the RCG is a vehicle for coordinating research into the long range transport of air pollutants in North America by both countries, with specific responsibility for consulting on ongoing research programs, and facilitating technical information exchange and the comparability of data.

## V. Overview of Domestic Authorities in the Field of Air Pollution

### A. Introduction

This chapter contains an overview of domestic authorities in Canada and the United States in the field of air pollution. Domestic law and regulatory practice in both countries are relevant to transboundary air pollution because they establish the legal authority available now to control air pollution, and because they can be expected to affect the manner in which commitments undertaken in an eventual bilateral agreement are implemented.

Most existing legislation in both countries is designed primarily to address the local impact of air pollution, rather than the interjurisdictional questions presented by the long range transport of air pollutants. The report does not attempt to deal with the adequacy of the legislation in either country, but rather summarizes what this legislation is.

Also, the report does not attempt to compare the laws and regulations of the two countries. While Canadian and United States environmental legislation is generally similar in purpose, in the sense that it is designed to produce and maintain an acceptable level of environmental protection, it naturally varies for a number of reasons. The development of government structures in the two countries has followed divergent paths leading on the one hand to a system of parliamentary government, and on the other a system of separation of powers. This fundamental difference in the constitutional arrangements of the two countries is reflected in their legislative philosophy and the style in which the legal systems are applied to deal with environmental problems. In Canada, generally speaking, much of the effective action is taken by means of specific regulations passed pursuant to legislation with broad application. In the United States more emphasis is placed on detailed provisions in the legislation itself and on private litigation. Another distinction is that while the provinces and states both play significant roles in implementing air pollution controls, provincial jurisdiction in environmental matters under the Canadian constitution is broader than the corresponding state jurisdiction under the US constitution.

Further, it is noted that the laws and regulations in each country have been designed to respond to different problems, since the major domestic pollution sources vary considerably. For example in Canada the major need has been to control the non-ferrous smelting industry, whereas in the

United States the major concern has been on the thermal power generation sector.

Domestic legislation has obviously been developed to deal with domestic air pollution problems. However, in the legislation of both countries, the need to deal with transboundary air pollution has been recognized. This may be seen from Section 115 of the United States Clean Air Act and the 1980 Amendment to the Canadian Clean Air Act (Bill C-51).

## B. Canada

### 1. General

Canadian authority to control air pollution rests in the various statutes of the federal government and the ten provinces. The major instrument of the Canadian Government in this area is the Clean Air Act (1971) which empowers the federal government to prescribe national ambient air quality objectives, national emission guidelines, national emission standards, and specific emission standards. The Act was unanimously amended by the Canadian Parliament in December 1980 (Bill C51) to expand the Government's authority to control directly pollutants crossing the international boundary on a basis of reciprocity with the United States.

In practice the exercise of authority in the field of air pollution is carried out on a cooperative basis by the federal government and the provinces, with much of the actual control of specific pollutant sources being carried out under provincial statutes. Action has recently been taken under provincial legislation to increase control of pollutants contributing to acid rain; in September 1980 the Government of Ontario issued a Control Order and a Regulation under the provincial Environmental Protection Act requiring a substantial reduction in pollutants from the INCO smelting operation at Sudbury, the largest single Canadian source of these pollutants. Another Regulation was issued in February 1981 requiring substantial reductions in acid causing emissions from the operations of Ontario Hydro, a crown corporation responsible for power generation in the province.

The nature of federal and provincial jurisdiction in the field of air pollution control is reflected in the way in which environmental protection is carried out in Canada. Implementation through domestic legislation of international commitments undertaken in an agreement could be effected by federal or provincial authorities, or a combination. The Great Lakes Water Quality Agreement is an

example of how the Canadian Government undertook major international commitments whose implementation was ensured through a separate federal/provincial agreement.

In order to provide a clear picture of environmental protection in Canada, it may therefore be helpful to summarize its constitutional basis as well as the specific provisions in federal and provincial legislation.

## 2. Constitutional Aspects

In Canada, legislative power is divided between the Parliament of Canada and the legislatures of the several provinces. The powers attributed to each level of government are, by and large, exclusive, that is to say, if the law is in relation to a specific matter, only the authority to which that subject matter is confided may make law. However, the treaty-making power itself is exclusively federal.

The provinces can address the problem of transboundary air pollution by enacting laws of general application within their territorial jurisdiction. On the other hand, federal laws, applicable throughout Canada, must be placed in the context of specific items, such as fisheries, the criminal law or certain international responsibilities of Canada. Hence, the problem of control or prevention of transboundary air pollution, compensation for its effects, and so forth, is customarily approached in Canada on an essentially cooperative or coordinated basis. While this aspect of the Canadian constitution makes the process of the implementation of treaties to deal with the control of transboundary air pollution more complex, it does not mean that Canada is unable to deal effectively with air pollution, as witness complementing federal and provincial legislation and international agreements described elsewhere in this Report.

Parliament also has exclusive power to implement treaties entered into by Britain on behalf of Canada, when that country had the responsibility for Canadian foreign relations. The most significant of these treaties relating to environmental protection is the Boundary Waters Treaty of 1909. Furthermore, Parliament can invoke its residuary jurisdiction under the constitution to extend protection to the residents of another country from endangerment to their health, safety and welfare caused by emissions originating in Canada where such protection is necessary to obtain similar protection for Canadians on a reciprocal basis.

## 3. Federal Legislation - General

The main instrument available to the federal government to control air pollution from stationary sources

- the source of virtually all transboundary air pollution - is the Clean Air Act, first enacted in June, 1971, and amended in December 1980 to provide reciprocal protection to residents of the United States, described further below.

However, there are other Acts which can be applied to ensure such control. Air pollution from substances which endanger human health or the environment can be controlled under the Environmental Contaminants Act. Fisheries Act jurisdiction can be used to control any discharge into the environment from whatever source, stationary or mobile, if the emission could ultimately pollute water frequented by fish. The use of the Fisheries Act is particularly important because it creates a strict liability for any discharges. Moreover, there is a specific section in the Criminal Code making it an offence to endanger the life, safety, health, property or comfort of the public. These Acts have been used or are available for use in the control of air pollution. Pollution from mobile sources is controlled by other legislation including the Motor Vehicle Safety Act.

## 4. Description of Federal Legislation

### Clean Air Act

The Clean Air Act of 1971 empowers the federal government to prescribe national ambient air quality objectives, reflecting tolerable, acceptable and desirable ranges of ambient air quality; national emission guidelines, indicating quantities and concentrations in which any air contaminant should not be emitted into the ambient air by any stationary or other source; national emission standards, establishing maximum quantities or concentrations of air contaminants that may be emitted from any stationary source; and specific emission standards for any stationary source. It defines air pollution to mean degradation of the ambient air due to emission of air contaminants to such an extent as to endanger the health, safety and welfare of persons, to interfere with the normal enjoyment of life or property, to endanger the health of animal life or to cause damage to plant life and to property.

#### i. International Provisions

The Clean Air Act was amended by Bill C-51, in December, 1980. Under this amendment, the federal government may prescribe a specific emission standard with respect to any source of air pollution if the emission from that source constitutes a significant danger to the health, safety and welfare of persons in another country, provided that that country gives essentially the same kind of

benefits to Canada. This action was taken with a view to establishing the reciprocity required for activation of Section 115 of the U.S. Clean Air Act.

Under the Amendment, where the source of air pollution is not a "federal work", specific emission standards with respect to that source may be prescribed by the federal government after notice of foreign representations has been forwarded to the province in which the work is situated, meaningful consultations with that province have taken place with a view to determining whether the emissions can be effectively controlled by provincial law, if any, and a reasonable effort to seek the application of such provincial law has been made. Where the source is a federal work the federal government is not required to consult with the provinces in establishing specific emission standards.

Proposed specific emission standards must be published in the Canada Gazette and a reasonable opportunity to make representations must be afforded to persons in Canada who would be affected by the proposed standards. Reasonable opportunity must also be afforded for the making of representations, in a manner to be prescribed by the federal government, on the part of the foreign country for the benefit of whose people the standards are proposed to be prescribed.

ii. National Ambient Air Quality Objectives

Section 4 of the Act empowers the federal government to prescribe national ambient air quality objectives reflecting three ranges of air quality for each contaminant: "tolerable", "acceptable" and "desirable".

These objectives are goals which have no legal effect unless prescribed as specific emission standards for "federal works", or incorporated by provinces in their legislation and municipalities in their bylaws, by virtue of federal-provincial agreements authorized under the Act.

iii. National Emission Guidelines

Section 8 of the Act authorizes the federal government to establish national emission guidelines indicating quantities and concentration in which any air contaminant should not be emitted into the ambient air by any source, stationary or otherwise. The guidelines now in effect were developed under the Department of the Environment Act, by a government-industry task force on the basis of agreements between government and industry which have as a criterion the "best practicable technology"

available to the industry. Provincial governments are also consulted in the development of these guidelines. The guidelines are legally enforceable against provincial works when adopted by the provinces.

iv. National Emission Standards

Section 7 of the Act authorizes the federal government to prescribe national emission standards establishing maximum quantities of concentrations of air contaminants that may be emitted from any stationary source. The authority to set these standards is given if the emission would:

(a) constitute a significant danger to the health of persons; or

(b) be likely to result in the violation of any international obligation entered into by Canada, relating to the control or abatement of air pollution in regions adjacent to the international boundary or throughout the world.

Proposed national emission standards must be published in the Canada Gazette and may be prescribed 60 days after such publication.

v. Specific Emission Standards

Section 13 of the Act empowers the federal government to prescribe specific emission standards for any stationary work, undertaking or business within the exclusive legislative authority of the Parliament of Canada ("federal works"). This generally does not extend to mobile sources.

Federal works "include a work, undertaking or business operated or carried on for or in connection with activities that fall under federal jurisdiction such as navigation and shipping, railways, canals, telegraph or other works, steamships lines, ferries, aerodromes and aircraft, radio broadcasting stations, nuclear establishments, etc."

As already indicated above, where an activity of a provincially regulated work (e.g. provincial hydro utility) causes pollution in another country, that activity can be subjected to federal legislation.

If a province has adopted national ambient air quality objectives, the federal government is empowered by section 20 to prescribe specific emission standards corresponding to the objectives (maximum "acceptable" level) with

respect to any work in that province, whether or not it is a federal work. These standards must take into account such factors as best available technology, rate of emission and total quantity of that air contaminant from other sources in the province in which the work subject to the standards is situated, and they can only be prescribed for non-federal works, after the province concerned has been consulted.

Any proposed specific emission standards may be prescribed 60 days after publication in the Canada Gazette.

vi. Enforcement

An inspector is authorized to require any person who proposes to construct, alter or extend a "federal work" likely to emit air contaminants to furnish plans and specifications to determine the quantity and concentration of air contaminant likely to be emitted. If an inspector believes there is likely to be a violation of specific emission standards, he may require modifications, or prohibit the construction. An inspector may issue an Order directing the operator of a "federal work" which is already in violation of specific emission standards to reduce emissions to an acceptable level. If the operator fails to comply with the Order, or if the emissions pose a serious danger to the health of persons, the Inspector may direct the operator of the work forthwith to discontinue its operation and to refrain from operating until the emissions are reduced to an acceptable level.

Contravention of national emission standards prescribed under section 7 or specific emission standards prescribed under sections 13 and 21.2 is an offence under section 9, and upon conviction a fine of up to $200,000 for each day the offence is continued may be imposed by a court.

The Attorney General of Canada may obtain a court injunction against any conduct that is an offence under the Act, notwithstanding that the offender has not been prosecuted.

No civil remedy is suspended or affected by reason that the act or omission of an operator is an offence under this Act.

Environmental Contaminants Act

This Act, which is administered jointly by the Department of the Environment and the Department of National Health and Welfare, is intended to reinforce existing authority. Control provisions come into play only when the federal government has firm reasons to believe that a

dangerous situation cannot be remedied any other way. Thus, the Act, which would apply to air as well as the other environmental media, could be utilized to control emissions contributing to air pollution if no action can be taken, for instance, under the Clean Air Act.

The Environmental Contaminants Act gives the federal government comprehensive powers to restrict or prohibit the release of a named substance into the environment, the use of that substance for certain purposes, and the incorporation of the substance in a manufactured product. Section 8 prohibits willful release of substances named in schedule to the Act in excess of quantities or concentration prescribed by regulations; the import, manufacture, processing, offering for sale or knowingly using a scheduled substance for a prescribed commercial, manufacturing or processing use, except when such substance is adventitiously present in the material and does not exceed a quantity or concentration consistent with good manufacturing practice; and the import, manufacture, knowingly offering for sale of a product that contains a scheduled substance in a quantity or concentration exceeding that prescribed for that substance in relation to such product. Offences under this section are punishable by a fine up to $100,000 for each offence on summary conviction or by imprisonment up to 2 years on conviction upon indictment. An offence continuing for more than a day is deemed to be a separate offence.

The Act has notice and public participation provisions which may be applicable to residents of the United States. Proposed regulations and modifications and addition of substances to the Schedule are required to be published in the Canada Gazette. Within 60 days of publication any person "having an interest therein" may require the Minister to inquire into the nature of the danger posed by the substance. The Act states that "any other interested or knowledgeable person may be given an opportunity to be heard at such a hearing. After sixty days, if no hearing is held, the Order or regulation comes into force or the substance is added to the list in the Schedule to the Act. If a hearing is held, the regulation or Order can only be made after the Board's report has been received by the two Ministers.

Fisheries Act

Subsection 33(2) is the core of the anti-pollution provisions of this Act. It prohibits the deposit of any deleterious substance in Canadian fisheries waters or in any place under any conditions where such deleterious substance, or any other deleterious substance that results from its

deposit, may enter such water. The prohibition would apply to substances entering Canadian fisheries waters after first having been transported through the air.

Subsection 33(11) defines a deleterious substance very broadly, and it can further be defined by regulations of the federal government.

The prohibition against pollution does not need regulations to activate it. However, there is no contravention of the subsection if the deposit of a deleterious substance is authorized under regulations made pursuant to the Act or pursuant to any other Act of the Parliament of Canada. The section imposes strict civil liability for clean-up on owners as well as operators of a polluting source and the liability is joint and several. The Act also authorizes the Minister to take preventive measures or with the approval of the government, to direct the closing of a work responsible for pollution.

Penalties under the Act can go as high as $50,000 for each day, for the first offence, and up to $100,000 for second and subsequent offences.

Criminal Code

Under section 179 of the Criminal Code, a person who does an unlawful act or fails to discharge a legal duty and thereby endangers the life, safety, health, property or comfort of the public, is guilty of an indictable offence called "common nuisance", and is liable to imprisonment for up to two years.

Federal Environmental Review Process

Procedures have been published setting forth guidelines for preparation of environmental review documentation on federal programs and projects, including projects financially assisted by the federal government including those with transboundary impacts. Preparation of such documentation is mandatory for programs and projects of departments of the federal government.

## 5. Provincial Legislation

### Introduction

The federal Clean Air Act applies when there is a significant danger to human health or when an international obligation is involved. However, responsibility for ambient air quality control in Canada generally rests with the provincial governments. For the sake of brevity, this

Report describes the environmental legislation pertaining to air pollution in the two provinces (Ontario and Quebec) currently most involved in the problem of long range transboundary air pollution.

Ontario

Ontario Environmental Protection Act. This Act prohibits the emission into the natural environment of any contaminant in an amount, concentration or level in excess of that prescribed by the regulations. It applies to all sources of pollution in Ontario, including fossil fuel-fired generating stations, even though such generating stations will have received provincial Cabinet approval in principle under the Power Corporation Act. Actions to increase control of acid causing pollutants from the INCO smelting operation at Sudbury Ontario and from Ontario Hydro have been taken under his Act.

The definition of "contaminant" in section (1) (c) is broad enough to include those emissions which cause acid precipitation. The Act (Section 14) prohibits emissions of any contaminant that "causes or is likely to cause impairment of the quality of the natural environment for any use that can be made of it" and prohibits any emission that "causes or is likely to cause injury or damage to property or to plant or animal life". Contravention of these prohibitions results in an offence under the Act and could give rise to prosecution.

A second instrument of importance is the Control Order. A director may issue a control order following a finding that a contaminant being emitted contravenes Section 14 of the Act or the maximum permissible amount set out in the Regulations. The control order is therefore a separate instrument available to control contaminants and has the advantage of applying to a source a specific set of rules tailored to reduce emissions. This also facilitates enforcement.

A third instrument available is regulation. Although usually thought of as a code of general rules supplementing the Act, Section 94(1)(b) of the Act permits the making of a regulation controlling the emission of any contaminant "into the natural environment from any source of contaminant or any class thereof". The section permits a regulation controlling emissions of $SO_2$ from a specific source.

One significant difference between a regulation and a control order is that a control order may be appealed to the Environmental Appeal Board which holds a hearing and

which has the power to vary the order. Provision is made for further appeals and extensive time can be consumed in the process. A regulation is not subject to a statutory appeal and is subject to challenge in the courts only on a limited range of issues, such as whether it is within the statutory authority under which it was passed.

One additional instrument available to the Ministry, although so far used on only a few occasions, is an order of the court restraining any contravention of the Act or a control order. Section 100 of the Act provides that these legal proceedings may be initiated by the Minister of the Environment.

In addition, section 8 of the Act provides that no person may construct or alter any plant from which a contaminant may be discharged unless he has a certificate of approval for the control of emissions. This approval may be accompanied by conditions, by which the Ministry can insist on appropriate methods to control emissions where the company is building a new plant, altering an existing one or altering a process.

Environmental Assessment Act, 1975. The purpose of this Act is to provide for the protection, conservation and wise management of the environment in Ontario. Under this Act, before proceeding with any major undertaking, the proponent must submit an environmental assessment of the project to the Minister of the Environment for approval. This Act applies as well to all provincial government projects, except those specifically exempted by Order-in-Council.

Quebec

In Quebec, air quality is governed by an act of general application, the Environmental Quality Act (RSQ, Chapter Q-2). This Act, in effect since 1972, applies to all aspects of the environment (ambient air quality, water quality, radioactivity, noise, vibrations, sanitary conditions, waste management, contaminants, waterworks, sewers and so on). It also contains requirements regarding assessment and review of the impact of new projects on the environment.

This legislation is geared to prevention of pollution and confers on the Department of the Environment broad powers of monitoring and supervision. It also confers on citizens a right to environmental quality which they can ensure is respected through recourse to a legal injunction, if necessary. The Act binds all Quebec governmental departments and agencies, as well as Quebec crown corporations.

Section 20 of the Environmental Quality Act is the section prohibiting air pollution in Quebec. It incorporates a strategy based essentially on a regulatory plan centered on emission standards as the preferred pollution control method. Thus the first paragraph of section 20 prohibits the discharge into the environment of contaminants in a greater quantity of concentration than that provided for by regulation of the Government.

The second paragraph of that section has two aspects: it establishes the same prohibition for any contaminant the presence of which in the environment is prohibited by regulation of the Government or

> "is likely to affect the life, health, safety, welfare or comfort of human beings, or to cause damage to or otherwise impair the quality of the soil, vegetation, wildlife or property."

This last prohibition -- of a residual nature -- is inspired by a pollution control method based on the concept of harmfulness. It has two advantages: first, its universality, (that is, it applies to all forms of environmental contamination ) and, second, its preventive value ("likely" to produce certain environmental effects).

This regulatory strategy does not, however, exclude recourse to ambient air standards as a pollution control method.

Mechanisms for intervention by the Department of the Environment include "cease" or "limit" Orders of the Minister or the Deputy Minister of the Environment, criminal proceedings, prior authorization in the case of new pollution sources, pollution reduction programs, imposed interventions whereby the Department of the Environment may itself carry out an order which has not been complied with by the person to whom it was addressed, injunction and emergency plans.

Other Provinces

A list of the main items of environmental legislation in the provinces of British Columbia, Alberta, Saskatchewan, Manitoba, Nova Scotia, New Brunswick, Newfoundland, and Prince Edward Island, as well as in the Territories is appended.

## 6. Standing from the Canadian Perspective

As a footnote to the substantive law relating to control of air pollution, it may be useful to note the question of standing before courts and administrative bodies.

Standing or locus standi concerns the question of whether a person shall be permitted access to a court or other body. It is essentially a procedural question relating to the rights of individuals to pursue private remedies for pollution damage rather than requirements for positive action to prevent pollution. While recourse to the courts is part of the Canadian system, it is not used as extensively as in the United States. Generally speaking, the emphasis of Canadian law is on requirements established by governements for preventive and remedial action. Obviously, in the field of transboundary air pollution, a right of access to the courts cannot be regarded as a substitute for a requirement for positive action by governments.

### i. Court Proceedings

Common Law Actions. The traditional common law actions of nuisance, riparian rights and strict liability under the rule in Rylands v. Fletcher for dangerous activities on land resulting in damage, are designed to protect private property interests. It follows that a person needs some interest, whether as owner, lessee or licensee, in the affected land to bring an action. Also, even if the affected land belongs to the plaintiff, if it is situated outside the jurisdiction of the court in which the action is brought (e.g. plaintiff with an interest in U.S. property suing in a Canadian court), then, because of the "local action" rule, i.e. the well-known Moçambique rule, in Canadian jurisprudence, that court is not competent to grant relief. On the other hand, if the action is not based on real property interests, but on some personal right of the plaintiff, courts do not hesitate to grant relief except where the plaintiff's interest is no greater than that of the general public. In such a case, only the Attorney General representing the State has the right to bring what is called a "relator" action.

The question of whether the abolition of the local action rule should be recommended to governments is now under consideration by a joint Canada-United States group of Uniform Law Commissioners.

Different considerations arise if the activity of a polluter causes injury to the health, safety or welfare of an individual; here, standing is not a hurdle, but the issue of causation might very well be.

Statutory Actions. The Clean Air Act and Environmental Contaminants Act provide that no civil remedy is suspended or affected by reason that the act or omission of an operator is an offence under those Acts. However, no

new remedy is provided and therefore the issue of standing before the courts still remains. Breach of a statute may be evidence of negligence.

Penal Proceedings. On the penal side, it may be observed that the activities prohibited by the Clean Air Act, and indeed any other federal environmental legislation, can be prosecuted as offences by the Federal government or by a provincial government. The Criminal Code itself makes a public nuisance (which it terms "common nuisance") an offence. In addition, the procedure of the Code may be used for the prosecution of offences under any other federal Act, and under that procedure any person may lay an information before a magistrate and commence a prosecution of the offender. The informant need not be personally affected, nor need he have property that is adversely affected by the offender's activity. Other than passing the threshold test, i.e. belief upon reasonable grounds that an offence has been committed, he need not have any qualification in order to lay the information.

The Attorney General may however step in at any stage of the prosecution and stay or quash it. There have been a few but significant private prosecutions under the Fisheries Act.

The Criminal Code does not define the expression "any person". As a non-resident has never laid an information, it is difficult to say whether that person would be included in the expression.

### ii. Adminstrative Process

The public's access to Canadian (federal and provincial) administrative process is often a matter of administrative discretion. The question of whether a right to participate in a hearing exists depends on interpretation of the particular statute involved and to a certain extent on the nature of the hearing. The law in this area applicable in the absence of clear statutory provisions is complex. While the question of a right to participate may pose some difficult legal questions, in practice there do not appear to be any obstacles to residents of the United States appearing to make their views known in administrative proceedings.

## C. United States

### 1. Constitutional Aspects

In the United States, as in Canada, legislative powers are held by both the federal and several state

governments. Unlike the Canadian case, however, there is very considerable, although far from complete, overlap in the areas in which power can appropriately be exercised by the federal and state authorities. As a general matter, the federal power is superior to that of the states and can preempt conflicting state enactments in areas in which the federal power may constitutionally be exercised. Although the federal power is broader when executing a treaty than in implementing a non-treaty international agreement, there is no question regarding the federal power to legislate in the field of air pollution by means of legislation such as the Clean Air Act. The existence of effective state legislation - as is required in the Clean Air Act - is, however, essential to the functioning of many federal enactments.

2. Federal Legislation - General

Air pollution in the United States is controlled mainly under the Clean Air Act. Other statutes bearing on the control of air pollution are the National Environmental Policy Act, Energy Supply and Environmental Coordination Act, Powerplant and Industrial Fuel Use Act, and a number of statutes administered by the Department of the Interior.

3. Standing from the U.S. Perspective

In addition to the provisions for government enforcement action, the U.S. legal system makes provision for actions by private parties and other entities, both in court and before the administrative agencies. While these provisions are not meant to be a substitute for state-to-state responsibility, they do constitute an important element in the U.S. system for reducing air pollution.

The single most difficult problem which would be faced by a Canadian party attempting to sue for damages or injunctive relief under U.S. law in a U.S. court would be establishing standing. While part of the standard which a Canadian would have to meet would be the same as that required of an American plaintiff (e.g., meeting the Constitutional test of "case or controversy"), it may be difficult in many cases for a Canadian party to demonstrate that he falls within the zone of interests intended to be protected by the U.S. statute concerned. It is not presumed that laws have application to non-resident aliens; the legislation and its history must be examined in each case to determine whether Congress intended to extend to non-resident aliens the right or protections offered by a particular statute. Unfortunately, the cases which address this question do not offer a reliable standard for predicting whether a statute will be interpreted to offer protection to Canadian parties.

Administrative proceedings The question of capacity to participate in administrative proceedings is somewhat different. Usually, a hearing which is open to the public will, as a practical matter, be open to the participation of concerned Canadian parties, both private and public. Also, federal agencies will readily make available to Canadian citizens and agencies documentation on policies, projects and other actions which the federal agencies are required to offer to the American public. Thus, there is generally no difficulty with Canadian interests becoming informed and making their views known in comment and rule-making procedures.

However, in this connection it is important to note that the extent to which a federal agency may make decisions based on comments (from anyone) is a separate question. In making a decision, the U.S. agency is limited to considering only those matters which are identified by law as being relevant criteria. If a comment urged a U.S. decision-maker to consider a matter that the relevant statute and regulations did not encompass, the decisionmaker could not legally take that matter into account. For him to do so would jeopardize the legality of the decision.

A more difficult question arises when a foreign party wishes to make use of federal laws designed to guarantee the procedural rights of U.S. citizens. The terms of the Administrative Procedure Act apply to "any person ... adversely affected or aggrieved ... within the meaning of any relevant statute"; one must therefore refer to the principal substantive statute to determine whether a particular person was intended to be protected by its provisions. If a Canadian party may not invoke procedural guarantees under a specific statute such as the Clean Air Act, the Administrative Procedure Act would seem to offer no greater protection.

Common Law and Related Actions. The federal common law of nuisance may serve as a basis for a suit by a private party to recover monetary compensation for damage suffered from transboundary air pollution. The suit would be a common law tort action for nuisance against the source allegedly responsible for causing the plaintiff's injury.

The federal question statute, 28 U.S.C. 1331, would afford a basis for federal district court jurisdiction, at least in cases involving interstate pollution and possibly in all cases involving transboundary pollution. Here, however, as noted above, serious questions would have to be answered with respect to standing of a non-resident alien to sue in U.S. courts; answering these questions would be particularly difficult where no

legislative history or statutory language is available to determine whether it was intended that foreign parties should have a right to bring such an action under the federal question statute.

There is also a question of whether the federal common law claim for nuisance has been preempted by the passage of the Clean Air Act. The Supreme Court has recently decided Milwaukee v. People of the State of Illinois, which held that the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., preempted the federal common law of nuisance in the context of actions seeking damages and abatement of water pollution. It is not yet clear whether this ruling will also govern interpretation of the Clean Air Act.

In any nuisance action there would be a very difficult proof problem of establishing some casual connection between emissions from a particular source and the resulting injury to the complaining party. As the distance from the emitting source or sources increased, and additional (possibly Canadian) sources could be included as contributing to the resulting injury, the plaintiff's proof problems would apear to grow more complex. Successful resolution of the proof problem would rest, of course, on the quality of the evidence and expert testimony that a plaintiff was able to marshall.

A possible alternative to reliance on the federal common law of nuisance is reliance on state law in federal court in a diversity action in which jurisdiction rests on 28 U.S.C. 1332. In such a case, the federal courts would be required to apply the tort law of the appropriate state according to established principles concerning rules of decision. In any such action there must be complete diversity between the plaintiff and defendant, and the plaintiff's claimed damages must exceed $10,000. Again the difficulties in proving causation would be present. However, this action under state law might be available even if the law becomes clear that the Clean Air Act preempts any federal common law claims.

Alien's Action for Tort

The Federal Judicial Procedure Code (28 U.S.C. 1350) provides that:

> "The district courts shall have original jurisdiction of any civil action by an alien for a tort only, committed in violation of the law of nations or a treaty of the United States."

Under this section, it would appear possible for a Canadian private party to bring an action in U.S. court for damages from air pollution, if he were able to demonstrate that a treaty binding on the United States and Canada provided such a right of action for individual Canadian citizens. (It is improbable that Canadian governmental entities, particularly the federal government, are intended to be given rights by the statute). Thus, this is merely a jurisdictional statute. It provides that if a right of action exists, federal courts have subject matter jurisdiction to hear the case. Section 1350 alone does not create any rights of action.

The right of action must arise out of a violation of the law of nations or treaty binding on the United States. The law of nations does not now appear to provide a right to make tort claims for transboundary air pollution, nor does any treaty now appear to create such a right of action.

The cases thus far decided under this statute have involved only private parties and treaties, in the domestic U.S. constitutional sense. However, a case presently under litigation involves the question of whether "torture" is prohibited by the "law of nations".

It is unlikely that executive agreements, in the domestic law sense, would be considered "treaties" for purposes of the statute, since the rights provided in them derive not from international customary or conventional (treaty) law, but rather from already existing domestic statutory authority.

In determining whether a cause of action exists, the cases have held section 1350 irrelevant. Instead, one must look to international law and, unless the treaty were intended to create a private cause of action, and the treaty were either self-executing or had been implemented by legislation, the plaintiff's claim would be dismissed for failure to state a cause of action.

4. The Clean Air Act

By far the most important U.S. statute relating to transboundary air pollution is the Clean Air Act. The Act provides the basis both for setting domestic emission standards and for their enforcement by a variety of means.

Under Section 115, upon certain findings of endangerment and reciprocity, specific provision is made for taking into account foreign concerns about U.S. - source pollution, and for directly integrating foreign interests

into the administrative processes so as to correct the situation giving rise to foreign concerns.

The structure of the Act is complex. However, the following general description of provisions of the Act should provide some understanding of how the Act works.

i. National Ambient Air Quality Standards (NAAQS)

Under Section 103 the Administrator of the Environmental Protection Agency (EPA) must issue air quality criteria for pollutants that cause or contribute to air pollution which may endanger public health or welfare and are emitted from numerous and diverse sources. Simultaneously with issuance of air quality criteria for a pollutant, the Administrator is required under Section 109 to propose national primary (health-protection) and secondary (welfare-protective) ambient air quality standards for that pollutant. After opportunity for comment the Administrator must promulgate the standards with any modifications he deems appropriate. EPA is currently reviewing the criteria and national standards for sulfur oxides (SOx), particulate matter and nitrogen oxides ($NO_x$).

The NOx criteria document is complete. However, it will be several months before the proposed standard is published. At that time, there will be opportunities to submit comments on the proposed standard and testify at public hearings. Canadian citizens or governmental entities may participate in this process. In addition, EPA is preparing a separate document on the effects of acid deposition. This document will be available for public (including Canadian) review when the draft is complete.

ii. Area Designation

Under Section 107, States are required to submit to the Administrator lists which designate, as to each pollutant for which a national ambient air quality standard is set, air quality control regions (or portions thereof) that: 1) are attaining the standard; 2) are not attaining the standard; or 3) cannot be classified as to attainment. The designations must be approved by EPA. Prior to final EPA action, EPA policy requires notice and comment rulemaking in which the public, including Canadian citizens and goverment entities, may participate.

iii. State Implementation Plans and Revisions

Section 110 requires the development of state implementation plans (SIP's) which serve to implement,

maintain and enforce national ambient air quality standards. Both the statute and EPA regulations establish many criteria the plans must meet, including the adoption of emissions limitatins on sources as necessary to ensure that national standards are attained and maintained. In general, any state plan or plan revision must be submitted to EPA for approval.

Opportunities for public ,including Canadian, participation, occur in comment periods and public hearings on EPA proposals to approve, disapprove or take no action on plans or revisions. Since plans establish emission limits for individual existing sources, rulemaking on plans and revisions is the prime opportunity for public comment on pollution control requirements for those sources.

Part D of the Act (Sections 171-178) sets out specific plan requirements for nonattainment areas which do not meet air quality standards. Although those requirements are in addition to and generally more stringent than those in Section 110, they are implemented through the Section 110 plan revision process. Therefore, any federal nonattainment regulations, or plan revisions to satisfy nonattainment requirements, are subject to public notice and comment rulemaking in which the public, including Canadian citizens and government entities, may participate.

While Sections 172 and 173 require states to develop programs to review proposed new and modified sources, once the program is approved by EPA the state operates the program. EPA regulations require state new source review programs to provide for notice and comment.

iv Primary Nonferrous Smelter Orders

Under Section 113, nonferrous smelters which cannot meet sulfur dioxide emission limitations in state implementation plans because adequate technology is not available may receive extensions, until 1988 at the latest, which exempt them from meeting the plan requirements. Sources apply for an extension order to obtain an exemption either to the state (which must obtain final approval from EPA) or directly to EPA, depending on whether the applicable plan requirements were promulgated by the state or by EPA. EPA's proposed action is subject to notice and comment rulemaking in which the public, including Canadian citizens and government entities, may participate.

v. Stack Height Regulations

Section 123 prohibits any source from receiving stack height credit above a "good engineering practice"

stack height in the calculation of its emission limitation. The Administrator is required to promulgate regulations defining what constitutes good engineering practice stack height. In January 1979 EPA proposed regulations to implement Section 123. Among other things, the regulations proposed a formula for calculating good engineering practice stack height and generally allowed sources automatic stack height credit based on the formula. Due to the need to conduct further regulatory impact assessment, promulgation of final stack height regulations has been delayed. EPA expects to promulgate the final rules this year; no further comment periods are planned.

This section also prohibits the use of other pollution dispersion techniques, such as intermittently switching from higher to lower sulfur fuels depending upon meterological conditions, in meeting emission limitations set under the Act.

vi. Prevention of Significant Deterioration (PSD)

The program requires review of new and modified major stationary sources to prevent significant deterioration (PSD) of air quality in areas where air pollutant levels are less than those required by national ambient air quality standards. EPA has promulgated regulations under Sections 160-169 to implement the various program elements, including requirements for technology review and air quality analyses. States are required to develop PSD programs that conform to EPA requirements. PSD permits are issued either by states or by EPA to sources seeking to build in clean air areas. State implementation plan revisions for existing sources must also be reviewed for their air quality impact on clean air areas.

Public participation, including that of Canadian citizens and government entities, can occur at hearings on generic state or federal regulations, on PSD permits and on state implementation plan revisions.

vii. Visibility Protection for Federal Class I Areas

Class I areas are statutorily mandated areas, primarily federal parks and wilderness areas, that have air quality better than national ambient air quality standards and for which visibility is an especially significant feature. There are about 36 mandatory Class I areas. Section 169A of the Act reqires the Administrator to promulgate regulations setting forth requirements for state implementation plans to protect visibility conditions in

these areas. The states are now in the process of revising their plans and the process allows for public participation, including that of Canadian citizens and government entities. The state implementation plan provisions will generally apply to specific sources and will have greater applicability in the western half of the country. All current EPA regulations under this section relate to visibility infringement due to plumes easily attributed to a given facility. The second phase of EPA's planned visibility program will deal with regional haze which is not attributable to a specific source or sources.

viii. International Air Pollution

Section 115 of the Act gives authority to the Administrator to require state implementation plan revisions either a) on receipt of reports from duly-constituted international agencies giving him reason to believe that an air pollutant emitted in the United States causes or contributes to air pollution which may reasonably be anticipated to endanger health or welfare in another country; or, b) upon receiving a request from the Secretary of State alleging that such air pollution is occurring. Invocation of Section 115 cannot be accomplished unilaterally by foreign private parties or government entities.

The Section may be brought into effect only if the Administrator has made a finding of "reciprocity", that is, that the other country offers the United States essentially the same rights relating to control of air pollution in that country which the United States offers the foreign country under Section 115.

Following these findings and the identification of the state or states where the emissions originate, the Administrator is to require the revision of the appropriate state implementation plan or plans to the extent necessary to abate the endangerment. An offending state must revise the state implementation plan in such a manner as to abate the endangerment. In that revision process, Section 115 makes expressly clear that the foreign government may participate fully in all administrative hearings.

ix. Judicial Review Under the Clean Air Act

EPA's approval of a revision to a state implementation plan may thereafter be challenged by any person pursuant to Section 307(b) (1) of the Act (42 U.S.C. 7607(b) (1)). Section 302(e) of the Act (42 U.S.C. 7602(e)) defines "person" as an individual, corporation, partnership, association, state, municipality, political subdivision of a

state, and any agency, department or instrumentality of the United States and any officer, agent or employee thereof. The principal basis for such a suit would most likely be an assertion that the state implementation plan relaxation would cause a violation of existing ambient air quality standards for the region in which the source is located.

Another basis for action is the "citizen's suit" provision in Section 304 of the Clean Air Act (42 U.S.C. 7604) which authorizes private parties to commence actions against polluting sources to enjoin violations of any provision of a federally approved state implementation plan, or any order issued under the Act by EPA or a state. Thus, if a source were emitting in excess of the limitation prescribed in the approved state implementation plan, a private party could commence an action against that source to enforce compliance. Any such suit must be preceded by 60 days advance notice to EPA and the state in which the violation is occuring of the intention to commence a lawsuit under Section 304.

In using Section 304 as a basis for suit, the plaintiff need not prove injury to the environment or himself; he need only establish that the source is operating in violation of the state implementation plan or an EPA or state-issued order. Although costs of litigation may be recovered (including attorney's and expert witness' fees), under a Section 304 proceeding no damages are available. However, there is nothing which would preclude the joinder of a nuisance claim with an action based upon Section 304. It should be noted that any remedy granted under Section 304 would not require a source to achieve emission limitations any stricter than those already contianed in the state implementation plan; thus, if a source obtained a relaxation, it could not be compelled to achieve more stringent emission limitations as a result of a suit under Section 304.

Standing. Whether a Canadian citizen would have standing under either Section 304 or 307 of the Act is not entirely clear. The question has not been litigated and cannot be answered with any degree of certainty. A private Canadian citizen may be a "person" within the meaning of Section 302 of the Act; however, the definitional section is narrowly drawn, and in light of Section 115, Section 302 could very well be interpreted not to include standing for foreign citizens within its scope. It is virtually impossible to read Section 302 to include a Canadian governmental entity.

7. Secondary Statutes

i. National Environmental Policy Act, 42 U.S.C. 4321

The National Environmental Policy Act (NEPA) requires preparation of an environmental impact statement (EIS) on all major federal actions significantly affecting the quality of the human environment. A significant exemption from its coverage is that, by statute, it is generally inapplicable to EPA activities, including those under the Clean Air Act. EIS's are required to be prepared under such other legislatin as the Powerplant and Industrial Fuel Use Act, 42 U.S.C. 8301, and other statutes relating to conversion to burning of coal.

The EIS process, which is essentially procedural rather than substantive, offers a significant opportunity for public comment and involvement. Decisions not to prepare EIS's are a matter of public record and draft EIS's must be offered for public review and comment; comments made are to be explicitly responded to in the final EIS by the agency concerned. It has become general U.S. practice to provide concerned Canadian agencies with copies of draft EIS's for their information and review, although the Canadian government has in the past been reluctant to comment formally. Private Canadian parties are free to comment on draft EIS's, notice of whose availability is given in the Federal Register.

Foreign parties have had at best limited success in obtaining standing to sue under NEPA. The broader question -- whether NEPA is designed to "protect" the environment beyond the United States -- has not yet been definitely resolved by the courts. The Executive Branch has taken the position, both through issuance of E.O. 12114 (Jan. 4, 1979) and in court, that an EIS cannot be declared inadequate, and the affected action thereby halted pending its rectification, on the grounds that foreign impacts were not considered.

Under E.O. 12114, the United States has assumed a unilateral obligation to review certain impacts abroad. While that Order expressly provides that it shall not serve as the basis for any legal action by U.S. or foreign parties, it does represent an important step by incorporating into the Administrative process consideration of environmental impacts abroad.

ii. Department of Energy Coal Conversion Legislation

The Department of Energy currently possesses authority under two statutes, the Energy Supply and

Environmental Coordination Act (ESECA), 15 U.S.C. Section 791 et seq. (1974), and the Powerplant and Industrial Fuel Use Act (FUA), 42 U.S.C. Section 8301 et seq. (1978), to advance the burning of coal in utility boilers and major industrial fuel burning installations by prohibiting such facilities from burning oil or natural gas. Because coal (or other alternative fuels) often has a higher sulfur content than natural gas or fuel oil, such ordered fuel conversions, in the absence of available controls, could result in a net increase in sulfur emissions. Emissions would increase if higher sulfur fuel was burned with the same level of controls. Emissions could decrease if the applicable state implementation plan required the installation of stack gas scrubbers. Most of the current recipients of proposed conversion orders are sited in the northeastern United States.

Nothing in either ESECA or FUA explicitly addresses the levels of emissions which will result from conversion to coal. However, both statutes and their legislative history indicate that all such conversions must take place under existing federal, state and local environmental law constraints.

The National Environmental Policy Act (42 U.S.C. Section 4321 et seq.) requires that significant environmental impacts resulting from each proposed coal conversion be addressed in an environmental impact statement (EIS). E.O. 12114 calls, in addition, for review of any environmental impacts abroad of these conversions; any such effects will be considered in the same EIS documents. Because of widespread sensitivity to changes in emissions from converting powerplants, each site-specific EIS will contain a detailed discussion of air quality impacts.

In addition, the Department of Energy is preparing a regional EIS to address the cumulative impacts of multiple coal conversions within the northeastern part of the United States. The air quality effects of these conversions on Canada will be addressed in that document under authority of E.O. 12114. It is currently anticipated that the regional EIS will be published in draft by August of this year. The Department of Energy will solicit comments on the data and methodology used as well as the conclusions reached in the EIS. The Department is required by federal regulation to allow at least 45 days for public comment on EIS documents. Because of the breadth of scope of the regional EIS, the Department of Energy currently anticipates an even longer comment period. Comments from the Canadian Government, provincial and local governments and private Canadian citizens will be welcome in order to assure that the final document properly reflects the views of all concerned parties.

### iii. Department of Interior Land Use Legislation

The Department of the Interior in the management of federal lands has a broad range of legislative power, important examples of which are described below, in which air quality considerations may or must be taken into account.

As a condition for the grant of the use of federal land (rights of way, leases, use permits) the Secretary of the Interior may include terms and conditions affecting federal lands related to air quality. Mineral Leasing Act of 1920, as amended (30 U.S.C. 181 et seq.) Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.)

Indian Reservations. Several Indian reservations are located near the U.S. - Canada border. Proposed actions. e.g., leases, rights-of-way, on those lands (including pollution emitting actions) must be approved by the Secretary of Interior, who could require environmental (air quality) stipulations.

Surface mining activities. The Secretary's regulations under the Surface Mining Act, which serve as guidelines to the state in developing state programs and which control activities on federal lands, require an operator to employ various air pollution control measures. These air quality regulations were recently challenged, and a U.S. district court found that they exceeded statutory authority. The district court found that the Secretary's authority was limited to the regulation of air pollution resulting from wind erosion of the land surface. The opinion noted, however, that the Act requires an operator to demonstrate an ability to comply with existing air quality laws. To date, the Secretary has not repromulgated new regulations.

Before an operator may begin surface mining, he must obtain a permit from the appropriate authority. The permit application submitted to the regulatory authority within the Department of Interior must be accompanied by an air pollution control plan. The regulatory authority must review the plan and either approve it or require the operator to employ additional control measures as a condition of permit approval. Disapproval of a permit application is also a possibility if the applicant has failed to demonstrate that the air quality requirements of the Act, the regulations and other federal and state laws can be feasibly accomplished under his mining and reclamation operations plan. Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. 1258(a) (9).

APPENDIX A

## Membership of Work Group

## United States

Chairman:

| | |
|---|---|
| David Colson<br>Acting Assistant Legal Adviser for Oceans, International Environmental and Scientific Affairs | Department of State |

Members:

| | |
|---|---|
| Jose Allen | Department of Justice |
| Jack Blanchard | Department of State |
| Gary Bohlke | Department of Interior |
| Hal Collums | Department of State |
| Faith Halter | Environmental Protection Agency |
| Mary McLeod | Department of State |
| Peter Olson | Department of State |
| Robin Porter | Department of State |
| Lydia Wegman | Environmental Protection Agency |
| Thomas Wolfe | Department of Energy |

## Membership of Work Group

## Canada

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| **Chairman:** | |
| Kenneth J. Merklinger<br>Director, U.S. Transboundary Relations Division | Department of External Affairs |
| **Members:** | |
| Gerald F. Fitzgerald | Department of Justice |
| Carlo Marcantonio | Environment Canada |
| Neil Mulvaney | Ontario Ministry of the Environment |
| Anne E. Park | Department of External Affairs |
| Mohan Prabhu | Environment Canada |
| M.J. Samson | Ministère des affaires intergouvernementales Québec |
| Donald W. Smith | Department of External Affairs |
| William Steggles | Ontario Ministry of the Environment |
| David Trick | Government of Ontario |
| Leslie Whitby | Department of Energy, Mines and Resources |
| Peter Wilson | Environment Canada |

# Joint Statement on Transboundary Air Quality by the Government of Canada and the Government of the United States of America

Transboundary air quality has become a matter of increasing concern to people in both the United States and Canada. This issue has many dimensions, including the long range transport of air pollutants and the phenomenon of "acid rain". Both Governments have recognized the need for close and continuing cooperation to protect and enhance transboundary air quality.

Discussions on transboundary air quality were initiated through an Exchange of Notes of November 16 and 17, 1978, in which the United States Department of State proposed that "representatives of the two Governments meet at an early date to discuss informally (a) the negotiation of a cooperative agreement on preserving and enhancing air quality, and (b) other steps which might be taken to reduce or eliminate the undesirable impacts on the two countries resulting from air pollution".

In reply, the Canadian Government indicated that it shared United States concern about the growing problem of transboundary air pollution. In particular, it noted the potential environmental impact, and the transboundary significance, of the long range transport of air pollutants. It therefore welcomed the opening of "informal discussions . . . with a view to developing agreement on principles which recognize our shared responsibility not to cause transboundary environmental damage, and which might lead to cooperative measures to reduce or eliminate environmental damage caused by transboundary air pollution".

Bilateral discussions of an informal nature took place on December 15, 1978, and June 20, 1979, and both Governments have exchanged discussion papers on principles which they believe have relevance to transboundary air pollution. As a result of these discussions it has become clear that Canada and the United States share a growing concern about the actual and potential effects of transboundary air pollution and are prepared to initiate cooperative efforts to address transboundary air pollution problems.

There is already a substantial basis of obligation, commitment and cooperative practice in existing environmental relations between Canada and the United States on which to address problems in this area. Both Governments are mutually obligated through the Boundary Waters Treaty of 1909 to ensure that

> ". . . boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property . .". (Article IV)

Both Governments have also supported Principle 21 of the 1972 Stockholm Declaration on the Human Environment, which proclaims that

> ". . . States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction."

A number of cooperative steps have been taken to deal with transboundary air pollution. In the 1978 Great Lakes Water Quality Agreement, both Governments commited themselves to develop and implement

> "programs to identify pollutant sources and relative source contributions . . . for those substances which may have significant adverse effects on environmental quality including indirect effects of impairment of tributary water quality through atmospheric deposition in drainage basins. In cases where significant contributions to Great Lakes pollution from atmospheric sources are identified, the Parties agree to consult on remedial measures".

Both Governments have sought to implement the principles of notification and consultation on activities and projects with potential transboundary impact, and to promote exchanges of scientific and technical information. In 1978 the two Governments established a Bilateral Research Consultation Group on the Long Range Transport of Air Pollutants to coordinate research efforts in both countries. Both Governments have also engaged the International Joint Commission in some aspects of transboundary air pollution. This has been done through References under the Boundary Waters Treaty establishing the Michigan/ Ontario Air Pollution Board and the International Air Pollution Advisory Board and through the Great Lakes Water Quality Agreement of 1978.

Having regard to these and other relevant principles and practices recognized by them, both Canada and the United States share a common determination to reduce or prevent transboundary air pollution which injures health and property on the other side of the boundary. Recognizing the importance and urgency of the problem, and believing that a basis exists for the development of a cooperative bilateral agreement on air quality, the Government of the United States and the Government of Canada therefore intend to move their discussions beyond the informal stage to develop such an agreement. Both sides agree that the following further principles and practices should be addressed in the development of a bilateral agreement on transboundary air quality:

1. Prevention and reduction of transboundary air pollution which results in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems, and impair or interfere with amenities and other legitimate uses of the environment.

2. Control strategies aimed at preventing and reducing transboundary air pollution including the limitation of emissions by the use of control technologies for new, substantially modified, and as appropriate, existing facilities.

3. Expanded notification and consultation on matters involving a risk or potential risk of transboundary air pollution.

4. Expanded exchanges of scientific information and increased cooperation in research and development concerning transboundary air pollution processes, effects, and emission control technologies.

5. Expanded monitoring and evaluation efforts aimed at understanding of the full scope of the transboundary air pollution phenomenon.

6. Cooperative assessment of long-term environmental trends and of the implications of these trends for transboundary air pollution problems.

7. Consideration of such matters as institutional arrangements, equal access, non-discrimination, and liability and compensation, as relevant to an agreement.

8. Consideration of measures to implement an agreement.

# MEMORANDUM OF INTENT BETWEEN THE GOVERNMENT OF CANADA AND THE GOVERNMENT OF THE UNITED STATES OF AMERICA CONCERNING TRANSBOUNDARY AIR POLLUTION

The Government of Canada and the Government of the United States of America,

Share a concern about actual and potential damage resulting from transboundary air pollution, (which is the short and long range transport of air pollutants between their countries), including the already serious problem of acid rain;

Recognize this is an important and urgent bilateral problem as it involves the flow of air pollutants in both directions across the international boundary, especially the long range transport of air pollutants;

Share also a common determination to combat transboundary air pollution in keeping with their existing international rights, obligations, commitments and cooperative practices, including those set forth in the 1909 Boundary Waters Treaty, the 1972 Stockholm Declaration on the Human Environment, the 1978 Great Lakes Water Quality Agreement, and the 1979 ECE Convention on Long Range Transboundary Air Pollution;

Undertook in July 1979 to develop a bilateral cooperative agreement on air quality which would deal effectively with transboundary air pollution;

Are resolved as a matter of priority both to improve scientific understanding of the long range transport of air pollutants and its effects and to develop and implement policies, practices and technologies to combat its impact;

Are resolved to protect the environment in harmony with measures to meet energy needs and other national objectives;

Note scientific findings which indicate that continued pollutant loadings will result in extensive acidification in geologically sensitive areas during the coming years, and that increased pollutant loadings will accelerate this process;

Are concerned that environmental stress could be increased if action is not taken to reduce transboundary air pollution;

Are convinced that the best means to protect the environment from the effects of transboundary air pollution is through the achievement of necessary reductions in pollutant loadings;

Are convinced also that this common problem requires cooperative action by both countries;

Intend to increase bilateral cooperative action to deal effectively with transboundary air pollution, including acid rain.

In particular, the Government of Canada and the Government of the United States of America intend:

1. to develop a bilateral agreement which will reflect and further the development of effective domestic control programs and other measures to combat transboundary air pollution;
2. to facilitate the conclusion of such an agreement as soon as possible; and,
3. pending conclusion of such an agreement, to take interim actions available under current authority to combat transboundary air pollution.

The specific undertakings of both Governments at this time are outlined below.

INTERIM ACTIONS

1. Transboundary Air Pollution Agreement

Further to their Joint Statement of July 26, 1979, and subsequent bilateral discussions, both Governments shall take all necessary steps forthwith:

(a) to establish a Canada/United States Coordinating Committee which will undertake preparatory discussions immediately and commence formal negotiations no later than June 1, 1981, of a cooperative agreement on transboundary air pollution; and

(b) to provide the necessary resources for the Committee to carry out its work, including the working group structure as set forth in the Annex. Members will be appointed to the work groups by each Government as soon as possible.

2. Control Measures

To combat transboundary air pollution both Governments shall:

(a) develop domestic air pollution control policies and strategies, and as necessary and appropriate, seek legislative or other support to give effect to them;

(b) promote vigorous enforcement of existing laws and regulations as they require limitation of emissions from new, substantially modified and existing facilities in a way which is responsive to the problems of transboundary air pollution; and

(c) share information and consult on actions being taken pursuant to (a) and (b) above.

3. Notification and Consultation

Both Governments shall continue and expand their long-standing practice of advance notification and consultation on proposed actions involving a significant risk or potential risk of causing or increasing transboundary air pollution, including:

(a) proposed major industrial development or other actions which may cause significant increases in transboundary air pollution; and

(b) proposed changes of policy, regulations or practices which may significantly affect transboundary air pollution.

4. Scientific Information, Research and Development

In order to improve understanding of their common problem and to increase their capability for controlling transboundary air pollution both Governments shall:

(a) exchange information generated in research programs being undertaken in both countries on the atmospheric aspects of the transport of air pollutants and on their effects on aquatic and terrestrial ecosystems and on human health and property;

(b) maintain and further develop a coordinated program for monitoring and evaluation of the impacts of transboundary air pollution, including the maintenance of a Canada/United States sampling network and exchange of data on current and projected emissions of major air pollutants; and

(c) continue to exchange information on research to develop improved technologies for reducing emissions of major air pollutants of concern.

The Memorandum of Intent will become effective on signature and will remain in effect until revised by mutual agreement.

DONE in duplicate at Washington, this fifth day of August, 1980, in the English and French languages, both texts being equally authoritative.

FOR THE GOVERNMENT OF CANADA:

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA:

ANNEX

WORK GROUP STRUCTURE
FOR
NEGOTIATION OF A
TRANSBOUNDARY AIR POLLUTION AGREEMENT

I. PURPOSE

To establish technical and scientific work groups to assist in preparations for and the conduct of negotations on a bilateral transboundary air pollution agreement. These groups shall include:

1. Impact Assessment Work Group
2. Atmospheric Modelling Work Group
3A. Strategies Development and Implementation Work Group
3B. Emissions, Costs and Engineering Assessment Subgroup
4. Legal, Institutional Arrangements and Drafting Work Group

## II. TERMS OF REFERENCE

### A. General

1. The Work Groups shall function under the general direction and policy guidance of a Canada/United States Coordinating Committee co-chaired by the Department of External Affairs and the Department of State.

2. The Work Groups shall provide reports assembling and analyzing information and identifying measures as outlined in Part B below, which will provide the basis of proposals for inclusion in a transboundary air pollution agreement. These reports shall be provided by January 1982 and shall be based on available information.

3. Within one month of the establishment of the Work Groups, they shall submit to the Canada/United States Coordinating Committee a work plan to accomplish the specific tasks outlined in Part B, below. Additionally, each Work Group shall submit an interim report by January 15, 1981.

4. During the course of negotiations and under the general direction and policy guidance of the Coordinating Committee, the Work Groups shall assist the Coordinating Committee as required.

5. Nothing in the foregoing shall preclude subsequent alteration of the tasks of the Work Groups or the establishment of additional Work Groups as may be agreed upon by the Governments.

## B. Specific

The specific tasks of the Work Groups are set forth below.

1. Impact Assessment Work Group

The Group will provide information on the current and projected impact of air pollutants on sensitive receptor areas, and prepare proposals for the "Research, Modelling and Monitoring" element of an agreement.

In carrying out this work, the Group will:

- identify and assess physical and biological consequences possibly related to transboundary air pollution;
- determine the present status of physical and biological indicators which characterize the ecological stability of each sensitive area identified;
- review available data bases to establish more accurately historic adverse environmental impacts;
- determine the current adverse environmental impact within identified sensitive areas--annual, seasonal and episodic;
- determine the release of residues potentially related to transboundary air pollution, including possible episodic release from snowpack melt in sensitive areas;
- assess the years remaining before significant ecological changes are sustained within identified sensitive areas;

- propose reductions in the air pollutant deposition rates--annual, seasonal and episodic--which would be necessary to protect identified sensitive areas; and
- prepare proposals for the "Research, Modelling and Monitoring" element of an agreement.

2. Atmospheric Modelling Work Group

The Group will provide information based on cooperative atmospheric modelling activities leading to an understanding of the transport of air pollutants between source regions and sensitive areas, and prepare proposals for the "Research, Modelling and Monitoring" element of an agreement. As a first priority the Group will by October 1, 1980 provide initial guidance on suitable atmospheric transport models to be used in preliminary assessment activities.

In carrying out its work, the Group will:

- identify source regions and applicable emission data bases;
- evaluate and select atmospheric transport models and data bases to be used;
- relate emissions from the source regions to loadings in each identified sensitive area;
- calculate emission reductions required from source regions to achieve proposed reductions in air pollutant concentration and deposition rates which would be necessary in order to protect sensitive areas;

- assess historic trends of emissions, ambient concentrations and atmospheric deposition trends to gain further insights into source receptor relationships for air quality, including deposition; and
- prepare proposals for the "Research, Modelling and Monitoring" element of an agreement.

3A. Strategies Development and Implementation Work Group

The Group will identify, assess and propose options for the "Control" element of an agreement. Subject to the overall direction of the Coordinating Committee, it will be responsible also for coordination of the activities of Work Groups I and II. It will have one subgroup.

In carrying out its work, the Group will:

- prepare various strategy packages for the Coordinating Committee designed to achieve proposed emission reductions;
- coordinate with other Work Groups to increase the effectiveness of these packages;
- identify monitoring requirements for the implementation of any tentatively agreed-upon emission-reduction strategy for each country;
- propose additional means to further coordinate the air quality programs of the two countries; and
- prepare proposals relating to the actions each Government would need to take to implement the various strategy options.

3B. Emissions, Costs and Engineering Assessment Subgroup

This Subgroup will provide support to the development of the "Control" element of an agreement. It will also prepare proposals for the "Applied Research and Development" element of an agreement.

In carrying out its work, the Subgroup will:

- identify control technologies, which are available presently or in the near future, and their associated costs;
- review available data bases in order to establish improved historical emission trends for defined source regions;
- determine current emission rates from defined source regions;
- project future emission rates from defined source regions for most probable economic growth and pollution control conditions;
- project future emission rates resulting from the implementation of proposed strategy packages, and associated costs of implementing the proposed strategy packages; and
- prepare proposals for the "Applied Research and Development" element of an agreement.

4. Legal, Institutional and Drafting Work Group

The Group will:

- develop the legal elements of an agreement such as notification and consultation, equal access, non-discrimination, liability and compensation;
- propose institutional arrangements needed to give effect to an agreement and monitor its implementation; and
- review proposals of the Work Groups and refine language of draft provisions of an agreement.

APPENDIX D

Main Items of Environmental Legislation in the Provinces of British Columbia, Alberta, Saskatchewan, Manitoba, Nova Scotia, New Brunswick, Newfoundland and Prince Edward Island as well as in the Territories

Provincial Legislation:

| | | Principle Legislation | Summary of Main Provisions |
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| 1. | British Columbia | Pollution Control Act 1967, c34 (Regulation: Pollution Control Regs. Permit Regs. Pollution Control Objectives) | The Act prohibits discharge or emission of any contaminant into the air without a permit or approval from the Director of Pollution Control Branch. The Director is authorized to determine what qualities and properties of air constitute a polluted condition, and issue cease and desist orders. The Minister of the Environment is also empowered to prevent, control, remove or abate pollution where a pollution emergency has been declared by him to exist. |
| 2. | Alberta | Clean Air Act, 1971 c.16 (Regulations: Clean Air (General) Regs. Clean Air Regs. Clean Air (Maximum Level) Regs.) | The Act prohibits discharge of air contaminants in excess of amounts prescribed by legislation, it prohibits construction, alteration, modification etc. of specified kinds of works unless the responsible government agency has reviewed and approved the plans and specifications of the proposed activity. Control measures include an Emission Control Order issued by the Director of Pollution Control and Stop Order issued by the Minister of the Environment. |
| | | Department of the Environment Act, 1971, c.24 | The Act establishes the Department of the Environment and authorizes the Minister to issue Stop Orders to prevent contravention of any |

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| Alberta (continued) | | | Act/regulation or to shut down the operations of any source that contravenes the law. |
| | | Hazardous Chemicals Act, 1978, C.18. | The Director of Pollution Control has power under this Act to issue and enforce a "Chemical Control Order" where the use, disposal, manufacture, method of disposal or of transportation of a hazardous chemical, causes impairment of the quality of the natural environment or adversely affects or impairs the health or safety of persons. |
| 3. | Saskatchewan | Air Pollution Control Act. R.S.S. 1978 C.A-17 (Regulations: Air Pollution Control Regs.) | The Air Pollution Control Regulations made pursuant to the Act, prohibit the discharge of any air contaminant that may cause discomfort to or endanger the health, safety or welfare of persons, cause loss of enjoyment of or damage to property. The Minister of the Environment is empowered by the Act to order any owner or operator to prevent or lessen the emission of any air contaminant that is causing air pollution. |
| | | Department of the Environment Act, R.S.S. 1978, c.D-14 | This Act establishes the Department of the Environment and authorizes the Minister to issue stop orders to prevent a contravention of any Act or regulation where such contravention may cause destruction, damage, or pollution of a natural resource. |

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| 4. | Manitoba | Clean Environment Act; 1972. c.76 (Regulations: Incinerators Regs. Secondary Lead Smelters Reg.) | Prohibits contamination of air in excess of prescribed limits. "Contaminant" is defined to include any substance that may be injurious to the health or safety of a person or that may interfere with the comfort, well being or enjoyment of a person. The Clean Environment Commission created by the Act is empowered to issue control or cease orders. The Minister of the Environment is also authorized to issue control and stop orders and he may even shut down the operation where he believes that such order is necessary to prevent serious loss or injury to persons or property. |
| 5. | Nova Scotia | Environmental Protection Act, 1973, c.6 (Regulations: Environmental Protection Regs.) | The Act prohibits the emission of any waste from any source into the environment that may cause pollution, unless a permit has been obtained for that source. Pollution is defined to mean a "detrimental alteration or variation of the physical, chemical biological or asthestic properties of the environment. The Minister of the Environment is empowered to control pollution or contravention of regulations or prescribed standards, by means of control or stop orders or orders requiring an owner or operator to take remedial action. New works or modifications that are likely to cause pollution must be approved by the Minister and existing sources may be required to obtain program approvals. |

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| 6. | New Brunswick | Clean Environment Act, R.S.N.B. 1973, c.C-6 (Regulations: Air Quality Regs.) | The Air Quality Regulation made pursuant to the Act prohibit any emission that may cause substantial loss of enjoyment of, or damage to property. The Minister of the Environment is empowered by the Act to issue control orders requiring an owner or operator to control or stop emission of any contaminants that endanger the health, safety or comfort of a person, or that interfere with the normal enjoyment of life or property. If there is an imminent danger to health of any person from a contaminant emitted from any source, the Minister has power to issue a stop over. |
| 7. | Newfoundland | Department of Provincial Affairs & Environment Act 1973 No. 39. | The Act authorizes the Minister, where he has information that pollution emanating from any source within the province is likely to render the air of the province harmful to public health, safety or welfare, to order the owner or operator to make any alteration or variation of the source, that the Minister deems necessary or to issue a stop order requiring the owner or operator to shut down the source. Regulations may be made under the Act prescribing what qualities and properties of air constitute a polluted or unwholesome condition, to preventing or restricting air pollution, etc. |
| 8. | Prince Edward Island | Environmental Protection Act, 1975, c.9. | The Act prohibits the discharge or deposit of any substance into the air that may cause pollution or impair the quality of the air unless an approval of the Minister |

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| 8. | Prince Edward Island (continued) | | is obtained. It authorizes the Minister to order a polluter to take remedial action and where the order is not obeyed, the Minister may take remedial action at the cost and expense of the polluter. |
| 9. | North West Territories | Environmental Protection Ordinance RO NWT, 1974, c.E.-3 | Subject to federal Act or regulation, the Ordinance prohibits the discharge of any contaminant into the environment that is likely to impair the quality of the environment or adversely affect the health, safety or comfort of any person. The Chief Environmental Protection Officer is empowered to issue Protection Orders, Stop or Control Orders, and Repair Orders. The chief Commissioner may issue clean-up orders. |
| 10. | Yukon | --- | --- |