Accord to Stop Acid Rain Damage

n March 13, 1991, Prime Minister Brian Mulroney and President George Bush signed the Air Quality Agreement in Ottawa. The agreement addresses the transboundary acid rain problem and establishes a means to deal with other air quality concerns, now and in the future. This accord will help guarantee cleaner air and a healthier environment for the people that inhabit North America.

The Acid Rain Threat

Acid rain has caused alarming environmental damage the world over. Since the 1970s, scientists have been linking the death of fish in lakes and streams to acidic fallout from smokestacks and tailpipes. There is evidence that waterfowl populations may also be threatened and soil acidity increased. Acid rain erodes buildings and monuments and may be one of the causes of forest decline. Human respiratory problems may also be linked to acidic emissions.

Acid rain endangers resources such as fishery, agriculture and forestry and causes up to \$1 billion worth of damage in Canada every year.

When acid rain falls, it does not respect borders. Scientists have established that the pollutants that cause acid rain, largely composed of sulphur dioxide (SO₂) from smelting and coalburning industrial activities, and nitrogen oxides (NO_x) from fuel combustion and automobile exhaust, are carried long distances. Reducing acidic emissions in one country is not enough to stop the problem. In fact, more than half the acid deposition in eastern Canada comes from emissions in the United States.

The Struggle to Stop **Acid Rain**

The first formal talks on acid rain were held as early as 1978. The ensuing struggle for recognition of, and action on, the acid rain problem involved three U.S. administrations and five successive Canadian governments.

It was no easy task to persuade the United States that the acidification of lakes and rivers was a real threat caused by airborne emissions and as such could only be solved by bilateral action. Indeed, during the

sulphur dioxide emissions in the seven easternmost provinces by 50 per cent by 1994.

It was not until 1990 that the United States put comparable legislation into place. The Amendments to the Clean Air Act signed by President Bush on November 15 included acid rain provisions to reduce annual sulphur dioxide emissions by 10 million tons by the year 2000. The way was now clear

The targets and timetables for the reduction of acidrain-causing emissions are dealt with in the first annex of the agreement. The annex contains the details of a permanent cap placed on sulphur dioxide emissions in both countries - approximately 13.3 million tonnes in the U.S. and 3.2 million tonnes in Canada. It addresses emissions of nitrogen oxides from factories and power plants,



early 1980s, the acid rain issue became a "major irritant" between two good neighbours, and the division in public attitude between Canada and the U.S. was dramatic. Acid rain became a household word in Canada. The scientific community, industry, environmental groups, all levels of government and the general public worked in genuine partnership to help stop acid rain.

As it became obvious that U.S. politicians and industry were deadlocked over the need for emission reduction, Canadian political opinion shifted. Instead of waiting for the U.S. to commit itself to pollution cuts before taking action at home, in 1985 the federal government and the seven easternmost provinces agreed to implement the Canadian Acid Rain Control Program. This successful cooperative initiative has as its goal the reduction of total

to achieving an agreement between the U.S. and Canada on acid rain.

The Agreement

The Air Quality Agreement requires both countries to reduce and put permanent caps on sulphur dioxide emissions. It commits them to notify and consult with each other in advance on any activities that could put transboundary air quality at risk. The fulfilment of commitments will be monitored publicly under the auspices of the International Joint Commission. And the agreement contains a means for settling any disputes that may arise. It is a good neighbours' accord, codifying the principle that countries are responsible for the effects of their air pollution upon one another.

Prime Minister Brian Mulroney (left) and U.S. President George Bush: tackling acid rain.

setting out a reduction schedule over the next 10 years. Tighter emissions standards for new motor vehicles are outlined. A second annex addresses cooperative research and monitoring activities in Canada and the U.S. Further annexes will be added as other transboundary air pollution problems, such as urban smog and air toxins, are addressed.

Current scientific evidence indicates that the sulphur dioxide emission reductions outlined in the agreement will stop acid rain damage in Canada. It's a true success story, and a heartening example of how commitment, co-operation, diplomacy and sheer persistence can solve tough environmental problems.