Acid Rain Agreement

The United States and Canada on 5 August moved a step closer to joint action on acid rain, an environmental pollutant that each exports to the other. Secretary of State Edmund Muskie and Canadian Ambassador Peter Towe agreed to establish scientific working groups of government experts from both nations, in preparation for the start of formal negotiations next June to limit acid rain.

Neither side expects that negotiations will be easy. Acid rain is caused in large measure by emissions from power plants, and any international arrangement must tread delicately around the energy plans of each nation, including greater interest on both sides in energy from coal. Coal-fired power plants emit more of the sulfur oxides and oxides of nitrogen that react in the atmosphere to precipitate as sulfuric and nitric acids in rain and snow.

The limited scope of the preliminary agreement reflects the diplomatic difficulties. It calls for consultation on anticipated industrial development near the U.S.-Canadian border, and on anticipated changes in regulatory policy. Canada is pleased with current tough provisions of the U.S. Clean Air Act as applied to emissions from new power plants, and would like to see old plants governed by the same standard. But it is worried that Congress might gut even the existing provisions in the rush to coal, when the act comes up for renewal next year—a fear that is shared by environmentalists in the United States. The preliminary agreement calls on both sides to enforce existing laws vigorously during negotiations, and to develop policies and strategies for tougher controls "as necessary or appropriate."

The agreement also establishes a scientific working group to take air samples and estimate the impact of acid rain on each nation's environment. The regions most affected are Vermont and New Hampshire, as well as the Adirondack Mountains in New York State and an area of Canada north of the Great Lakes known as the Precambrian shield region. Each lacks acid-neutralizing natural minerals, and thus is vulnerable to destruction of its fish and possibly agricultural crops and forest.

Another working group is to determine precisely where the acid rain originates. According to current estimates, the United States contributes half of the acid rain precipitate in Canada, while the Canadians contribute four to five times less to the United States. But the relative contributions vary with seasonal windflows, which have not been pinpointed.

A third working group is to compose a strategy for acid rain abatement. John Roberts, the Canadian minister for the environment, has estimated potential Canadian abatement costs at $400–$500 million a year between now and the year 2000, while U.S. costs will be five to eight times higher.

Each country will obviously be constrained at the negotiation table by whatever might prove acceptable to the various legislators and utilities interested in the agreement. In Canada, the political problems are made more difficult by the relative independence of each of its provinces.

In the United States, the utility interest is a powerful lobby, as indicated by a recent Senate vote on a bill requiring conversion of 80 power plants from oil and natural gas to coal (the "Oil Backout bill"). The changeover is expected to increase emission of sulfur oxides and nitrogen oxides by 20 percent. Acting out of concern for the effects of acid rain, Senator Paul Tsongas (D-Mass.) proposed an amendment barring the power plants from increasing the emissions, either by burning low sulfur coal, burning at a lower temperature, or achieving offsetting emission decreases elsewhere. Some of the utilities' costs would be covered by federal grants and loans. But the amendment failed in committee and lost on the Senate floor by a vote of 63 to 31, after intense industry lobbying.

Muskie says the achievement of an agreement with Canada on acid rain "is close to my heart as a New Englander, a former senator from a border state, as a committed environmentalist, and as a citizen who believes deeply in a strong friendship and partnership between our two countries." It is obvious that he will need more support, and Congress is the place he must ultimately go to get it.—R. JEFFREY SMITH

Had the trial been conducted in California, where juries really appreciate the importance of the quality of life, Ellin thinks, the award would have been double what it was.

Lehninger's story of how he came by his bone disease is fairly straightforward, except at the points where he argues that the physicians at Hopkins were partly responsible for causing it. In the court filings he claims that malpractice was committed twice: first, when the original fracture was examined, and then 2 years later, when surgical pins were removed from the hip. Mistakes made at these times, Ellin argues, fostered the development of avascular necrosis (death of the bone due to inadequate blood circulation) in Lehninger's hip. It is an irreversible disease that destroys the affected area of bone.

Albert Lehninger, the father, did not want to comment, except to say that he "had to testify." This was an apparent reference to the fact that he was called as a witness to corroborate a key conversation between his son and his son's physician, Robinson. The discussion took place in 1973 when the pins were taken out, and the gist of it, the Lehningers say, was that Robinson assured the Lehningers that there was no evidence of avascular necrosis, and that if it were going to appear, it would have done so by that time. The point was critical because the statute of limitations does not apply when important information has been withheld, or a patient has been misled about his condition. The Lehningers argue that Robinson's reassuring words prevented them from discovering what had really happened until nearly 5 years later. It was then, they say, that the statute of limitations began to run.

Lehninger, the son, was unavailable for comment, having completed a fellowship at the University of Texas at Galveston and departed without leaving a number where he could be reached. A colleague there, John Barber, said Lehninger had been doing cat research and was looking for an academic post of some sort, but that most had been filled by now.

The medical history of this case began in 1971, when Lehninger fell on the ice while on a weekend ski trip. He took himself to the Hopkins emergency room complaining of pain. A resident physician had an x-ray made, examined it, and concluded that there was no evidence of a fracture. He sent Lehninger home with a cane and instructions to rest and return to the hospital a few days later. Before returning to the hospital, Lehninger fell again on the same hip. He went to the

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