

claimed the agents could only have been uncovered by tip-offs to the New Zealand government from the secret services of other countries, as a way of undermining the French nuclear testing program. Britain, the United States, and

the Soviet Union have each been mentioned.

And even conservative politicians, careful not to antagonize their relationships with the secret service, for which, after next year's general elections, they

are likely to take over responsibility, are being careful to aim their criticisms at the incompetence of individuals—and the interference of outside parties—rather than at the government's nuclear testing policies.—**DAVID DICKSON**

## U.S., Mexico Pledge Smelter Controls

In July, the United States and Mexico pledged to control pollution from three giant copper smelters located near the border between Arizona and Mexico. But Western politicians and environmentalists have serious doubts about whether the promises can be kept because several problems are unsolved.

The matter is likely to gain increased political attention as a result of a recent report that demonstrates for the first time a link between smelter emissions in the Southwest and acid rain hundreds of miles away to the north. The report, which was published last week in *Science*,\* presents evidence that changes in smelter emissions were proportional to changes in acid rain in Colorado, Utah, and Idaho.

One of the smelters is located in Douglas, Arizona, and is owned by Phelps Dodge. It is an old smelter that chugs out an average of 950 tons of sulfur dioxide a day. The other two are located in Mexico about 50 miles away. One is an existing smelter in Cananea whose plant capacity has been expanded; the other is a new smelter in Nacozari, which is not yet operating, but poses the greatest concern. Once it starts up, the Nacozari plant without pollution controls will emit even more sulfur dioxide than the Phelps Dodge smelter. According to the *Science* paper, prevailing winds around the border area carry the pollution from existing smelters to the Colorado Rockies and beyond.

In the July agreement, the United States and Mexico exchanged "firm commitments" that each country would regulate the smelters. The U.S. promised that by 1988 the Phelps Dodge smelter would be in compliance with U.S. federal air pollution regulations. The Mexicans said that the Nacozari plant will have controls in place by 1988.

But there are significant hurdles that the Mexicans must cross before the controls can be put in place. The Mexican government currently has no statutory authority to enforce smelter controls and says that the laws are "still being completed." In addition, the Nacozari plant, which is 44 percent owned by the state and the remainder by private interests, has not yet found financing for the pollution controls, which are estimated to cost between \$50 million and \$65 million and will take at least 18 months to build. Mexico, whose economy is in dire straits, has told the United States that it will have to raise part of the money by first starting up the plant and funneling some of the revenues into emission controls.

Western government officials and others are nervous that Mexico may not be able to follow through. David Steele, a staff aide to Senator Dennis deConcini (D-Ariz.) in Tucson, says the commitment between the two countries "is an agreement. That's all there is. It's not binding." Michael Oppenheimer, a scientist at the Environmental Defense Fund who is a coauthor of the recent report correlating smelter emissions with acid rain in the West,

remarks that there is little incentive for Mexico to retrofit the Nacozari plant once it is operating.

The United States has little, if any, leverage over its southern neighbor. Arizona governor Bruce Babbitt is pressing the U.S. Environmental Protection Agency to impose controls on the Phelps Dodge plant as soon as possible, hoping that the action will set an example for Mexico. Under the Clean Air Act, the company is supposed to have controls installed by next year.

But Phelps Dodge has asked EPA for a waiver that would give it a 2-year reprieve. According to EPA regulations, a waiver can be granted if the company can prove it will suffer a net loss of revenues if the controls are installed. According to David Solomon of EPA, the agency is still conducting an economic evaluation, but expects to make a decision within the next 2 months. Babbitt last week asked EPA to deny the waiver.

Solomon and others at EPA say there is no reason to doubt that Mexico will keep its word. Solomon says, "Mexico has done nothing to demonstrate that they are not acting in good faith." To show its concern, Mexico in the July agreement promised to accelerate the installation of the Nacozari controls by 6 months, from mid-1988 to January, 1988.

The U.S. negotiations with Mexico put the Reagan Administration in a delicate position in light of its acid rain policy with states in the Northeast and with Canada. With them, the Administration has maintained that there is insufficient evidence that controls on emissions from Midwestern utilities will significantly reduce acid rain to the

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north. The new acid rain study, however, provides more ammunition to proponents of stricter controls.

As a result of increasing data that acid rain is a regional problem in the West, the dynamics of the national debate about the acid rain problem in the Northeast and Canada may shift. Western states in the past have opposed federal controls on acid rain because they felt the problem was not theirs. In July, Representative Henry Waxman (D-Calif.) and Senator Gary Hart (D-Colo.) held separate field hearings focusing on acid rain in the West. Senator Max Baucus (D-Mont.) is planning acid rain hearings this fall in his home state. Babbitt has led other Western governors to press for strong controls on the smelters. If a Western coalition eventually forms on the issue, the Administration would have a tougher time blocking acid rain legislation.

—**MARJORIE SUN**

\*M. Oppenheimer et al., *Science* 229, 859 (1985).