

that daily emissions of man-made sulfur dioxide vastly exceed those of Mt. St. Helens.

Finally, Reagan has asserted that Mother Nature—not mankind—is responsible for most air pollution, or rather, as he later said, most oxides of nitrogen. Some of the oxides, he added, may even be helpful to tubercular patients. Apparently, Reagan confused nitrous oxide (which comes from trees and vegetation) with nitric oxide and nitrogen dioxide, the man-made pollutants.

Speth of CEQ said tartly that these statements "reflect a pervasive misunderstanding of key facts and issues." He said there is bad news and good news in all this. "The bad news is that he [Reagan] believes it. The good news is that he said it." Reagan responded in a fashion by calling reporters who questioned him "nit-picky."

According to CEQ's own survey, the statements only mirror an increasing view that air pollution is no longer a serious problem. Reagan might even be on the cutting edge of a trend, since more and more people apparently agree with the charge that environmental problems are not as serious "as some people would have us believe." Presumably, Speth would be included among "some people."

In any event, Reagan cannot be solely faulted for troubled communications with the electorate on an issue with environmental implications. Less than half of the public knows what synthetic fuels are, according to the poll, despite the fact that they are the centerpiece of Carter's energy program. Perhaps those who gave incorrect answers in the poll will also miss the poll on 4 November.

## Scientists' Boycott Grows

The effort by American scientists to boycott relations with the Soviet Union has received significant support from abroad. Groups in Washington, London, Paris, and Geneva recently announced that 1800 scientists and engineers from 43 nations have agreed not to cooperate with the Soviets until dissident Soviet scientists have been released from prison. In addition, the number of U.S. scientists who have

signed the boycott pledge has now swelled to 6000 and includes 32 Nobel laureates.

Morris Pripstein, a physicist from Berkeley and organizer of Scientists for Orlov and Shchransky, said the announcement was timed to coincide with preparations for an upcoming international conference on the 1975 Helsinki Accords. The conference begins on 11 November in Madrid and will last several months. Pripstein was joined at the Washington press conference by Christian Anfinsen, a biochemist at the National Institutes of Health, and Paul Flory, a chemist at Stanford, both Nobel laureates.

Pripstein says he has received indirect word that Yuri Orlov, the Soviet physicist who chaired the unofficial "Moscow Helsinki Watch Group," was recently sentenced to 6 months in solitary confinement for attempting to smuggle out a manuscript. Orlov, apparently in poor health, has also been denied the opportunity to get food packages from his family until next August.

Pripstein says the boycott will probably continue until Orlov and others are released. In recent boycott action, some physicists at CERN refused to cooperate with a visiting Soviet delegation, forcing a cancellation of the trip. Last month, the Soviets abruptly canceled an international meeting on collective accelerators, purportedly because of low Western subscription. And last spring, organizers of an international meeting in France on photon collisions issued "anti-invitations" to prospective Soviet participants.

Members of the boycott are still trying to overcome a Soviet perception that they were pressured by the Carter Administration and Congress, a view that undermines its effectiveness. The Soviets were apparently encouraged in this belief by Senator Robert Dole (R-Kan.), who introduced legislation last year, albeit unsuccessfully, to officially bar cooperation. The Soviets' misunderstanding has probably also been encouraged by the statements of Frank Press, the White House science adviser, linking the curtailment of official science ties with the invasion of Afghanistan. Pripstein says the message that their action is independent of the Administration "is getting through, but very slightly." The new participation by scientists from nations

whose governments have maintained official ties (Switzerland, France, West Germany, Japan, and others) is expected to be of some help.

On another front, the American Psychiatric Association has appealed for the release from prison of Vyacheslav Bakhmin, a member of the unofficial Moscow commission to investigate the use of psychiatry for political purposes.

## Love Canal Reviewed

A special New York State panel has released the first postmortem on the state and federal response to Love Canal (*Science*, 13 June), and it is not a pretty sight. The panel included Lewis Thomas of Memorial Sloan-Kettering and Arthur Upton of New York University (formerly director of the National Cancer Institute). They concluded that:

An atmosphere of public hysteria was created by a state report in 1978 that called the site a "public health time bomb" of "great and imminent peril." Strong language was apparently used in order to satisfy legal requirements for special federal and state funds; meanwhile, the description had no basis in fact.

Hysteria was fueled by the congressional testimony in 1979 of Beverly Paigen, a cancer researcher at Roswell Park Memorial Institute and a consultant to the homeowners. Paigen claimed to have uncovered pregnancy disorders, birth defects, and other illnesses. "The Panel finds the Paigen report literally impossible to interpret. It cannot be taken seriously as a piece of sound epidemiological research."

More recently, the Environmental Protection Agency conducted a cytogenetics study of the residents, a study the panel termed "a paradigm of administrative ineptitude . . . that should never have been launched in the first place. The damage done by . . . EPA is perhaps beyond mending."

In sum, the panel found no evidence of acute effects and no good studies of chronic effects. It recommended start-up of a state science advisory board to comment on future Love Canal research.

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