edited by RICHARD STONE

Senate Axes EPA Clean-Air Research

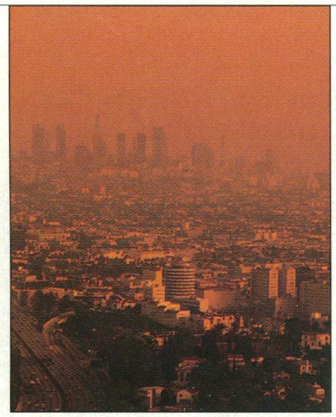
Just as the Environmental Protection Agency (EPA) is promising to bolster its long-term research program, the Senate has eliminated two initiatives designed to gather long-term data on smog and other air pollution.

Last week, EPA administrator Carol Browner unveiled a plan to shift research funds from short-term to long-term research (*Science*, 29 July, p. 599). Jibing with EPA's new philosophy are two research initiatives for 1995: a $4.6-million program on tropospheric ozone and a $4.4-million program on airborne particulate matter (PM_{10}).

But last month the Senate appropriations subcommittee that oversees EPA's budget deleted funds for the programs. The reason: The Senate cites a 29 April memo from EPA's Science Advisory Board to Browner, which says that the ozone and PM_{10} research were "coming at a time when current revisions of the criteria documents"—which tell how the agency's proposed regs adhere to national air-quality standards—"are either in the late stages of planning and/or review." The message was that the research would not influence current EPA policy. Asks a Senate staffer, "Why are we funding it if the agency can't use it?"

But four scientists*—all of whom have headed EPA's Clean Air Scientific Advisory Committee—don't see it that way. In a letter last week to Senator Barbara Mikulski (D–MD), chair of the appropriations subcommittee, the scientists claimed "it would be tragic and shortsighted if the Senate markup reductions for ozone and PM_{10} research were to stand." Even though the research would not affect current regs, "it would permit substantial improvements" when standards are revisited down the road.

The research programs were untouched in the House budget bill; a conference to reconcile the bills, which could restore at least partial funding, was expected to occur after *Science* went to press.



ALON REININGER/CPI/STOCK MARKET

Cloudy vision. The Senate has cut two EPA air-pollution programs.

Japanese Radiation Center Wins Reprieve

A monetary crisis that has threatened a unique radiation research center in Japan has been averted—but only temporarily, and only with a quick fix in which the United States has begged a 3-month loan from the Japanese government. The crunch hit the Radiation Effects Research Foundation (RERF) of Hiroshima and Nagasaki last spring (*Science*, 15 April, p. 338), jeopardizing U.S.–Japanese studies of the 1945 atomic bombings. According to a Department of Energy official, a new agreement will allow RERF to keep its doors open at least until October, when the new U.S. fiscal year begins and "we get a fresh infusion of cash."

However, because of a budget shortfall on the U.S. side, the joint project is surviving this summer partly on a $1.8-million loan from Japan, to be repaid in 1994. Unfortunately, says the Energy official, repaying the debt this fall will probably usher in a new money crisis next spring.

PCAST MEMBERS	
John Gibbons, science adviser to the pres., chair John Young, former pres. of Hewlett-Packard Co., chair	
Norman Augustine CEO, Martin Marietta	Peter Raven, director, Missouri Botanical Garden
Francisco Ayala, biologist, U. of California, Irvine	Sally Ride, physicist, U. of California, San Diego
Murray Gell-Mann physicist emeritus, Caltech	Judith Rodin, pres., U. of Pennsylvania
David Hamburg, president, Carnegie Corp.	Charles Sanders CEO, Glaxo Inc.
John Holdren, physicist, U. of California, Berkeley	Phillip Sharp biologist, MIT
Diana MacArthur CEO, Dynamac Corp.	David Shaw, CEO, David Shaw & Co.
Shirley Malcom AAAS	Charles Vest president, MIT
Mario Molina, atmospheric chemist, MIT	Virginia Weldon Monsanto Co.
Lilian Shiao-Yen Wu, mathematician, IBM	

At long last, PCAST. Earlier this week, after 8 months of preparation, the White House finally unveiled the President's Committee of Advisers on Science and Technology (PCAST). The 19-member body was created last November, but the names had awaited final approval since at least March, when John Gibbons, assistant to the president for science and technology, described its gender and ethnic composition to a congressional panel. Indeed, PCAST is a diverse group, with six women and representatives from at least three minority groups.

NRC Questions NASA Human Research Plans

The National Research Council (NRC) has voiced a new concern over joint U.S.–Russian space activities: Planned medical experiments aboard the space shuttle and the Russian Mir station could be of little value unless the two countries forge an agreement ensuring ample volunteers for medical experiments.

In a letter to National Aeronautics and Space Administration (NASA) administrator Dan Goldin last week, the NRC Space Studies Board praised NASA efforts to beef up science on the planned international space station. The board, chaired by Massachusetts Institute of Technology astrophysicist Claude Canizares, concluded that the station "could provide a productive laboratory for life sciences and microgravity research" if NASA added equipment such as a centrifuge and provided an environment free of gravitational disturbances—a problem that has bedeviled crystallography aboard Mir.

But the board also raised concerns about science plans for the 30-odd shuttle flights—some to dock with Mir—preceding station construction. Perhaps the toughest hurdle to overcome will be getting good human data. Unless Russian cosmonauts participate in experiments, "there will be an insufficient sample size to enable scientists to draw any firm conclusions" about the effects of microgravity, the board states.

"We share that concern," says Harry Holloway, NASA's associate administrator for life and microgravity sciences. The problem is that astronauts and cosmonauts can decline to serve as subjects. For instance, a few years ago NASA scientists proposed a "painful procedure" that entails cutting out bits of muscle. "Astronauts were less than enthusiastic," Holloway says. Nevertheless, he says, NASA intends to develop a research design over the next several months "that will allow us to ethically pursue human experiments in space."

*Bernard Goldstein, UMDNJ–Robert Wood Johnson Medical School; Morton Lippmann, New York University Medical Center; Roger McClellan, Chemical Industry Institute of Toxicology; and George Wolff, General Motors Corporation.