versity cooperative extension consultants from conducting research. Marsh, however, has not ruled whether this is a legitimate issue.

The case may or may not ultimately go to trial. The legal assistance group has the option of asking the judge to decide the legal issues based on evidence submitted to the court without formal hearing. The group has not yet decided whether it will do so.

—MARJORIE SUN

## Lawsuit Seeks a Cap on Fluorocarbon Production

When the Environmental Protection Agency (EPA) in 1977 banned the use of chlorofluorocarbons in aerosols, the action was regarded as a stopgap measure to limit damage to the ozone layer. Now production of chlorofluorocarbons for nonaerosol uses is said to be rising, and the increase threatens to offset the gains achieved by the ban. On 27 November, the Natural Resources Defense Council sued EPA to place a cap on overall production. A few days earlier, by coincidence, a scientific paper was published that the environmental group says bolsters its position.

Chlorofluorocarbons are now primarily used in the United States as coolants in refrigerators and air conditioners, but they are increasingly used as solvents in the manufacture of computer chips. Their emissions could lead to depletion in the ozone layer, which could, in turn, cause climatic changes, and, by allowing more ultraviolet radiation to reach the earth's surface, lead to an increased incidence of skin cancer and damage to crop plants by disrupting photosynthesis.

The Natural Resources Defense Council argues that the Clean Air Act requires EPA to regulate chlorofluorocarbons if they pose a danger to health or the environment. It asserts that EPA acknowledged this danger when the agency in 1980 proposed a limit on production. The proposal has languished during the Reagan Administration, however, and the group thus wants the U.S. District Court in Washington, D.C., to order EPA to issue regulations in 6 months.

Industry has complained that the United States is being unfairly singled out to solve a global problem. Spokesmen have pointed out, for example, that many other countries even continue to use chlorofluorocarbons as aerosol propellants. But current U.S. production accounts for a large portion of worldwide use. The environmental group asserts that the U.S. should set an example for other countries in limiting production. It notes that after EPA imposed a ban on aerosols, several other countries followed suit.

Alan Miller, a former attorney for the environmental group and now a researcher at the World Resources Institute, says that EPA is "walking a tightrope" on the issue. Although the agency has not sought a production cap, it is currently collaborating with the State Department on an international plan to control, limit, reduce, or ban certain uses of chlorofluorcarbons. The plan, which is still in its early stages of development, is to be presented eventually to the United Nations Environment Program.

The environmental group is hoping that its case will be boosted by a paper published in the 15 November issue of *Nature*. Harvard researchers concluded, based on chemical models of the atmosphere, that if chlorofluorocarbon emissions increase 2 to 3 percent annually, the total ozone density could be reduced by more than 15 percent by the middle of the next century. "This is a very big effect," says Michael Prather, the lead investigator. He and his colleagues assert that when chlorine concentrations in the atmosphere reach a certain point, the rate of ozone depletion speeds up much more rapidly than previously believed.

Whether this depletion will actually occur as the scientists described is uncertain because the science of the stratosphere is extremely complex. Current models for stratospheric chemistry include as many as 200 reactions, for example, and projections thus tend to be controversial. In addition, recent worldwide production rates have been highly variable. In 1982, production dropped about 8 percent, but last year increased 10 percent. Miller, however, argues that "it's better to err on the side of caution and implement regulations so that growth doesn't occur."

—MARJORIE SUN

## Comings and Goings

The musical chairs that accompanied the elevation of Senator **Bob Dole** (R–Kan.) to the post of Senate Majority Leader has given the chairmanship of the Senate Committee on Commerce, Science and Transportation to Senator **John Danforth** (R–Mo.). The post became vacant when Senator **Bob Packwood** (R–Ore.) moved to fill Dole's old slot at the head of the Finance Committee. The commerce committee has formal oversight over science and technology policy. Danforth, a lawyer, has taken an interest in higher education and last year sponsored a bill supported by the Association of American Universities that would have provided federal support for university facilities.

The Pentagon's top scientist, **Richard DeLauer**, left the government on 30 November to return to private industry. Before being appointed Undersecretary of Defense for Research and Engineering early in 1981, DeLauer was head of research at TRW. DeLauer is widely credited with assisting the universities in their successful fight to head off unpalatable restrictions on the communication of the results of basic research supported by the Pentagon.

*Richard D. DeLauer*

**William Ruckelshaus** has resigned as head of the Environmental Protection Agency after an 18-month stint. He said he has accomplished his goal of putting the agency back on course after the buffeting it took under the leadership of Anne Burford. He will be replaced by **Lee M. Thomas**, who, as assistant administrator for solid waste, has been in charge of the superfund program. Thomas was Ruckelshaus's choice for the top job.