for damaging the BSCC's credibility. According to White House sources, several months ago OSTP urged NSF officials to find a replacement for Kingsbury on the BSCC. Kingsbury submitted a letter to OSTP on 17 September stating that he would abstain from taking part in BSCC activities until Justice completed its investigation, but he did not resign from the council.

The BSCC was first established in October 1985 by former presidential science adviser George Keyworth. Its charter included a "sunset" provision that automatically disbanded the organization on 1 October 1987, unless the White House chose to extend its life. Graham, who has succeeded Keyworth at OSTP, decided this summer that BSCC should continue to operate in some capacity. But there was debate within the White House about whether the membership, mission, and duties should be broadened to take on policy issues.

The debate has ended with the creation of a Committee on Life Sciences (CLS), which will handle interagency policy issues. It will be chaired by OSTP's Berger and will include most cabinet departments and key independent agencies—EPA, NASA, and NSF. The following White House offices also will be represented: the Office of Management and Budget, the Office of Policy Development, the Council of Economic Advisors, Council on Environmental Quality, and the Office of the U.S. Trade Representative.

The establishment of the policy committee is being received favorably by House and Senate congressional aides and environmentalists. They view it as a step toward "balancing the physical sciences tilt" at OSTP. Wyngaarden's appointment to the BSCC also is viewed positively. "Wyngaarden is an all right guy and knows the biomedical side of these issues," says Jack Doyle of the Environmental Policy Institute.

Environmentalists are disappointed that OSTP did not revamp the BSCC's structure, however. "The problem is that the council has been dominated by the biomedical community," says Doyle." They want the council to be more sensitive to environmental science and ecological issues.

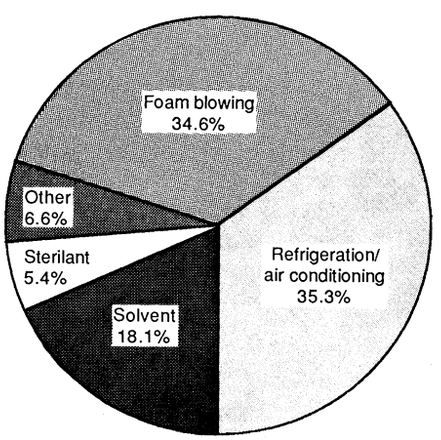
The first meetings of the new BSCC and the CLS are not expected to take place before January. While there is no tentative agenda for either organization, the BSCC has a backlog of unfinished business. This includes defining what is a "deliberate release" or what constitutes "containment" for genetically altered organisms that are the subject of greenhouse experiments. Says one USDA official, "I see a lot of the same problems that were around a year and one-half ago." ■ **MARK CRAWFORD**

EPA to Cut U.S. CFC Production to Protect Ozone in Stratosphere

The Environmental Protection Agency (EPA) is proposing to freeze and then halve emissions of chlorofluorocarbons (CFC) in the United States over the next decade. The agency's 1 December announcement complies with a federal court order, the result of a lawsuit brought by an environmental group, that requires it to issue rules to protect the stratospheric ozone layer. Production of the chlorine-emitting compounds would not be reduced uniformly. Output of CFCs would be cut according to their capacity for destroying ozone, which shields animal and plant life from excessive levels of ultra violet radiation.

CFCs are used extensively in the United States and in major western industrialized countries, primarily as cooling agents and solvents, and in manufacturing plastic foam products. EPA, however, in its draft rules suggests that American industry will be able to shift to substitute products or reduce use of CFC compounds substantially in most cases. Use of bromine-based Halon compounds, which are most destructive to ozone, also can be reduced greatly, EPA says. The Halon gases are used primarily for fire control and their production would be frozen at 1986 levels in mid-1992.

EPA's proposed rules, which the agency is mandated to publish in final form next August, are consistent with the plan for protecting the ozone layer that was worked out in September by the United Nations Environment Program (UNEP) (*Science*, 25 September, p. 1557). More than 23 nations have endorsed the treaty on a preliminary basis. It will go into force in 1989, or as soon as enough of the industrial nations responsible for the bulk of CFC emissions worldwide ratify it. In line with the treaty, EPA proposes that production and use of CFC compounds be frozen first, then cut by 20% by 1993 and by 50% by mid-1998.



Chlorofluorocarbon use. *CFCs are used intensely in U.S. industry for a range of purposes. EPA says substitutes can be adopted for most purposes within 10 years.*

David Doniger, an attorney for the Natural Resources Defense Council (NRDC), says the agency's proposed action does not appear to meet the requirements of the Clean Air Act. "In our view the regulations will be legally inadequate unless they prevent ozone depletion." The environmental group, which went to court in 1985 to force the agency to regulate CFC emissions, could initiate new legal action against EPA after final rules are issued in August.

Lee Thomas, EPA's administrator, defended the agency plan before reporters on 1 December, stating that the concentration of CFC compounds in the upper atmosphere is not projected to rise to a level where ozone levels will erode beyond natural variations. NRDC's Doniger, however, says the statement only may be true if the world does nothing to curb emissions of carbon dioxide, methane, and other gases that contribute to global warming. These gases help buffer the cholrine elements in the upper atmosphere as CFC compounds degrade.

Some key members of Congress also believe the measures proposed by EPA and UNEP are inadequate. On 12 November, five members of the Senate Subcommittee on Environmental Protection asked Mostafa Tolba, UNEP's director, to convene an international meeting within 6 months to consider imposing stiffer measures to control CFC emission in light of new data gathered from Antarctica.

Thomas says the agency has not ruled out taking tougher action. Analyses of the accuracy of the statistical models used by EPA to forecast ozone depletion trends and a review of research data gathered in September and October on the growing ozone hole in Antarctica (*Science*, 9 October, p. 156) could alter the agency's position.

But for the immediate future, Thomas is reluctant to push Japan, the European Community, and other countries to accept deeper cuts—at least not until the treaty goes into force. He fears that if countries are pushed too hard, the UNEP treaty could crumble. Says Thomas, "I don't want to give anybody the excuse to say we don't need to go forward with the process right now because it looks like we have more data coming forward in 6 months." ■

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