

tants, particularly in relation to other diseases as well as cancer. "Because of the present commitment of EPA to respond to near-term exigencies, it has not been able to develop a strong long-term health research capability," the OTA reviewers allege.

Observers not connected with EPA were the first to bring several pollution problems to public attention, such as those of vinyl chloride and nitrosamines in air and of chloroform in water. This suggests, says the OTA group, that EPA should improve its prediction record by developing a system for screening pollutants.

In the field of control and abatement technology, the OTA review says that the EPA's development efforts appear to favor demonstration over exploratory re-

search. This raises a familiar problem: "To the extent that EPA is both regulator and developer, it could be put in the position of promoting its own technology." Talley says it hasn't happened yet.

In another major research area, that of the transport, fate, and monitoring of pollutants, the OTA reviewers feel that much of EPA's work is fragmented. "Research into the complex of processes that link emissions from a source and their effect on the biosphere has not been assigned a high enough priority to support the scientific basis of the regulatory process," says the OTA report.

Turning to socioeconomic research, the reviewers fault EPA for putting highest priority on technological fixes for environmental issues, even though in

many cases the most important problems are institutional.

A criticism that occurs several times in the review is that the EPA should do more to coordinate and take the lead in federal research on environmental issues. At present, says the OTA report, "there appears to be no coherent integration" of federal environmental research and development programs except in the energy area, and the EPA's 5-year plan offers no method of achieving such coordination. Talley's response is that "EPA has no federal responsibility for coordinating federal environmental research." OTA project director Daly says that such responsibility is implicit in the agency's legislation, and that the 5-year plan in any case speaks of EPA's coordinating role. The plan, in an appendix, states that EPA "is clearly mandated to be the lead agency in environmental R & D," and that it "has the responsibility to make sure that environmental R & D capabilities in other agencies are not unnecessarily duplicated. . . ."

The OTA review is the first major public criticism of EPA's research since September 1974 when two separate reports, one by the National Academy of Sciences and one by the staff of the Senate Public Works Committee, said that the agency's research effort was in shambles.

Interest in Peaceful Nukes

Talley became EPA research director shortly thereafter, and the management structure of the program was reorganized in mid-1975. OTA's Daly says that the review should not be construed as a criticism of Talley, who submitted the 5-year research plan to Congress voluntarily (a bill exists requiring such a plan but it has not yet been passed).

Talley is a nuclear physicist with an interest in the peaceful use of nuclear explosions. Is a nuclear background embarrassing for a director of environmental research? Not at all, Talley says. He has been a member of the Sierra Club for 15 years, and it was the desire to help avoid greater penalties to the environment that led him into nuclear energy. Later he served on the Ash Council, the group that recommended the creation of EPA to President Nixon.

Though the OTA report is hard hitting, Talley is studious in avoiding any counter criticism. "If they had said the plan's the greatest thing since sliced bread, I don't think I would have been particularly pleased because I would not have learned anything."

—NICHOLAS WADE

Briefing

Junk Charge Dropped Against VIMS Director

Embezzlement charges against William J. Hargis, Jr., director of the Virginia Institute of Marine Sciences (VIMS), brought by a local grand jury last July, were dropped on 1 September by Gloucester County Circuit Court Judge James B. Wilkinson. As a result, Hargis, who had stepped aside as VIMS director until the matter was settled, has resumed his duties as director (*Science*, 10 September).

The case against Hargis was so flimsy as to call into question the motives of the state in bringing it. No satisfactory explanation has yet come to light, nor is there any evidence to corroborate speculation that Hargis' outspoken statements on the Kepone pollution scandal were the cause of the state's actions against him.

Hargis had been accused of improperly appropriating to himself 167 hours of back leave in connection with service since 1971 as vice chairman and chairman of the National Advisory Committee on Oceans and Atmosphere (NACOA), which advises the President and the Secretary of Commerce on ocean matters. Hargis had also been indicted for allegedly wrongly allowing a ship's carpenter to take some rusted diesel engine parts from the VIMS premises in October, 1975.

Judge Wilkinson dismissed the annual leave charge right away, for lack of evidence. Subsequently, he heard the coun-

ty prosecutor's case on the junk engine parts charge, and then told the jury that he would not allow it to consider that charge either. Judge Wilkinson remarked that he didn't see on what grounds the grand jury had indicted Hargis in the first place—a remark which may have referred to the role of the state police investigator, J. K. Adams, who investigated Hargis and made the presentation to the grand jury last July.

Reacting to the news, Hargis told *Science*, "I feel much better about it [the case], of course. But I still don't know why I've been put through this. I don't know who's responsible or why. . . . My family is relieved, but we think somebody owes us an apology."

Friends of Hargis, some of whom have started a defense fund to pay his legal costs, have speculated that Hargis was investigated, indicted, and prosecuted for political reasons. VIMS has been a major source of data on the extent of Kepone contamination in area fish and shellfish. Moreover, earlier this year, VIMS issued some comments on a draft environmental impact statement for a proposed Portsmouth oil refinery, which were critical of the plan. The comments were widely interpreted as being critical of any more refinery construction in the Chesapeake Bay, although a VIMS spokesman notes that the refinery's builders have taken the VIMS criticisms into account.

It is a matter of record that state officials, who have fostered the growth of industry in the region, which has 80 per cent of Virginia's population, have been irritated at VIMS.—D.S.