Pollution research in a sorry state

Colin Norman, Washington

THE federal government's research and development programmes for cleaning up water pollution are starved of money, poorly managed and badly coordinated, according to a massive study carried out by the General Accounting Office (GAO). Unless the programmes receive more funds, the GAO said in a report made public last week, the goals set by the 1972 Water Pollution Control Act will not be met. Charges of financial undernourishment are commonplace in Washington, but in this instance they gain considerable credibility from the fact that the GAO, which is an investigative agency of Congress, has no axe to grind since it does not have a direct stake in the matter.

The Water Pollution Control Act, which was passed by Congress in December 1972, specifies that waterways in the United States should be clean enough to swim in by 1983, and that no pollutants at all should be discharged into navigable waters by 1985. Those are tough goals to meet, and they will clearly require massive investment of funds in sewage treatment plants. They will also require a vigorous programme of research and development on new control technologies.

Far from pursuing a vigorous programme, however, the Administration has cut some research budgets and failed to disseminate results from the studies which are being carried out. Moreover, the GAO charges that no overall strategy for research and development has been worked out by the Environmental Protection Agency, and the research is therefore not sufficiently geared towards meeting the goals specified in the Water Pollution Control Act.

Between July 1969 and June 1973, about $495 million was spent by twelve federal departments and agencies on water pollution research, some $238 million of which was spent by the Environmental Protection Agency (EPA). Although the EPA is supposed to be the focal point in the federal government for pollution control research and for enforcing federal environmental laws, its water pollution research budget was actually cut by the Administration in the 1973 fiscal year, from about $50 million to $42 million. Meanwhile, the water pollution research programmes of other agencies doubled between 1969 and 1972, increasing from $36 million to $71 million.

A prime objective of the EPA's research programme should be to minimise the costs of treating municipal sewage, because huge sums of money will be spent in the next few years on treatment plants—the 1972 Act, for example, authorises expenditures of $18,000 million between 1973 and 1975 for grants to help in the construction of sewage plants. A small percentage saving from research would clearly save large sums of money.

But the GAO report points out that although $3,000 million was earmarked for municipal sewage grants in 1973, only $9.5 million was earmarked for the development of control technologies. That translates to an investment of only 0.3% in research, and compares with a rate of 8% in the Department of Transportation's urban mass transportation programmes, and a rate of about 4% in industry, the GAO report notes.

A similar situation exists in another important EPA research programme—research aimed at determining how pollutants get into water, what happens to them, and what their effect is (so-called process and effects research). The GAO found that because of funding limitations and poor management, important research needed to establish water quality standards has been delayed, and research on thermal discharges has been inadequate. As far as the latter programme is concerned, the GAO report notes that thermal pollution is likely to be a rapidly growing problem as the number of power plants increases, but research is proceeding slowly, and according to the director of one EPA laboratory, the agency has not even begun to solve the thermal pollution problems likely to be present in 20 years' time.

The GAO also found that there is a lack of coordination between the government's research and that conducted by industry, to such an extent that "we were informed (by representatives of industry) that industry was reluctant to reveal to EPA the level of technology developed to control pollution because (EPA) might speed up its enforcement action and industry might suffer a financial loss".

What needs to be done to alter this sorry state of affairs? Apart from increasing expenditures on research and development, the GAO report recommends that EPA should draw up a research and development strategy which would estimate the amount of money needed to meet the goals set out in the Water Pollution Control Act. The Office of Management and Budget should designate a federal agency as the focal point for coordinating research, and for disseminating research results, and ensure that EPA gets full cooperation from other agencies in drawing up its research and development strategy.

As for the Congress, the GAO suggests that since it is doubtful that waterways will be cleaned up by 1983 with present research funding levels, some thought should be given to increasing research appropriations. The

Sherman quits NIH

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A TOP official at the National Institutes of Health has resigned in frustration over the Administration's policies for biomedical research in general and for NIH in particular. Dr John Sherman, Deputy Director of NIH since 1968, and an NIH employee since 1953, will be leaving early in March to join the staff of the Association of American Medical Colleges, a Washington lobbying organisation.

Sherman said in a telephone interview last week that he has resigned "because of a number of tangible and intangible things" which are eroding the prestige of NIH and "making it a less attractive place to do research in". Chief among Sherman's complaints are the fact that the Administration has cut the number of personnel positions at NIH, and because he finds a lack of understanding between officials in the agency and administrators in the Department of Health, Education and Welfare.

As far as staffing is concerned, Sherman pointed out that personnel have been cut back at a time when the budget has been expanding, and when greater emphasis is being placed on contract research as opposed to grants. Contracts take more time to administer, and therefore require more staff.

For some time, there has been general discontent at NIH over policies dictated by the Nixon Administration. Many of the complaints have revolved around budgetary problems, because the Administration cut many of the institutes' research budgets last year, and also because Congress and the Administration failed to agree on a budget for the agency for almost 18 months. But Sherman's complaints go deeper than simple lack of money. "There is a sort of a sense of negativity (in the Department of Health, Education and Welfare), and a lack of understanding between us and the decision-makers", he said, and many of the frustrations stem from the strict management control that the Administration is trying to place on basic biomedical research.

Sherman first joined NIH in 1953, he has been an Associate Director of NIH for Extramural Programs, and was appointed Deputy Director in November, 1968. When Dr Robert Q. Marston resigned as NIH Director a year ago, Sherman was appointed acting director for some six months.

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