Nuclear waste

Ocean disposal recommended

Washington

THE US Government is being urged to consider ocean disposal for accumulating low-level radioactive wastes. In a special report to the President and Congress, the National Advisory Committee on Oceans and Atmosphere (NACOA) says it is concerned that "too little attention" is paid to the possible advantages of land disposal. The committee calls for more research to assess marine disposal options for ecological effects and pathways to man.

The United States has not dumped radioactive waste at sea since 1970, but other countries continued low-level disposal at various sites until a two year moratorium instituted under the London Dumping Convention in 1983. Despite strong political resistance to the practice, several nuclear nations are considering resuming dumping when the moratorium ends.

NACOA points out that the rate of production of low-level waste in the United States is likely to increase; the figure in 1980 was around 80,000 cubic metres. The US Navy has 100 operating nuclear submarines, and will be decommissioning between three and five per year, while several large commercial power reactors are nearing the end of their lives. NACOA believes that advances in marine science have made much less uncertain the environmental effects of ocean disposal, and urges Congress and the administration to reverse the present policy of excluding this option.

NACOA offers no detailed new study of environmental effects, but points out that all the anthropogenic radioactivity that has reached the oceans since 1944 is only one tenth of one per cent of the total natural radioactivity in the oceans. It raises the question whether agreement can be reached on a level of anthropogenic radioactivity low enough to be ignored. The difficulty, acknowledged by NACOA, is that the national phobia about nuclear activities makes rational debate difficult.

The federal government and the nuclear power industry have, it says, limited credibility — "too often power reactors have proved to be less safe than advertised, and proposed waste disposal sites have shown more complex geology than originally suggested". NACOA calls on the Department of Energy to provide financial support to citizens' groups to initiate a public debate on radioactive waste disposal and restore confidence.

The Office of Science and Technology Policy at the White House is charged with initiating the new research effort, aimed at clarifying the effects of low-level waste disposal at sea. At present, responsibilities are divided between several agencies, and NACOA wants to see a new inter-agency forum to examine the issues in detail. Investigations under way into the feasibility of sub-seabed emplacement of high-level waste might, it believes, shed light on low-level waste options. It also calls for an inventory of all anthropogenic radioactivity in the ocean; the International Atomic Energy Agency could undertake the task. In addition, US waste classification should conform with that of the agency.

According to NACOA's own estimates, the largest source of anthropogenic radioactivity in the ocean has been from weapons tests before 1968. Other major contributors have been lost submarines, plutonium-producing reactors and reprocessing plant. The list, however, is undoubtedly incomplete. NACOA bemoans the fact that much US dumping of low-level waste before 1970 was not adequately recorded, so that the opportunity to study carefully the effects of known dumps has been lost.

International agreement on dumping is highly desirable, it says, because the United States is not the only country contemplating a return to sea disposal, and its actions will be seen as setting a precedent.

Tim Beardsley

Burford in hot water

FEELINGS continue to run high over President Reagan's appointment of Mrs Anne M. Burford as chairman of NACOA, the National Advisory Committee on Oceans and Atmosphere (see *Nature* 19 July, p.171). On 24 July, the Senate passed a resolution calling on the President to withdraw Mrs Burford's nomination by 74 votes to 19, with strong support from both Democrats and a majority of Republicans.

The motion was sponsored by Senator Edward Kennedy, who told the Senate that the President appeared to have forgotten Mrs Burford's record as administrator of the Environmental Protection Agency, described as "controversial and flawed". Senator Kennedy proceeded to recite a catalogue of delays and obstructions to the agency's work which he laid at Mrs Burford's door. Senator Alan Cranston,

co-sponsoring the motion, described Mrs Burford as an "enemy of environmental protection". The Senate's confirmation is not required for Mrs Burford to be appointed, because the committee on oceans and atmosphere is only advisory. President Reagan appears unrepentant, however. Noting that the Senate's resolution was not binding, the President has said he will stand by the appointment.

The matter is nevertheless unlikely to rest there. Moves are afoot in both houses of Congress to change the status and powers of NACOA. A bill introduced last week by Senator Ernest Hollings would at a stroke abolish the committee and then reconstitute it, but in such a way that members would have to claim some scientific expertise relevant to environmental policy (which it is thought would rule out Mrs Burford).

Under the Hollings bill, the Senate would have the power to veto appointments. There may be some constitutional difficulties in this course, however, and an alternative being promoted in the House of Representatives by Representative Richard Ottinger would do away with NACOA altogether. This might pressure the Senate into reviving an earlier proposal for a National Oceans Policy Committee, which again would increase the power of Congress to influence appointments.

Tim Beardsley

Uranium

Australian exports continue

Canberra

FOLLOWING a 55:44 vote in favour at last month's Labor Party national conference, the continued export of uranium oxide is now part of Australian government policy. The most important in a week-long series of victories for Prime Minister Mr R.J. (Bob) Hawke, the vote was carried amid impassioned pleas and protests from the left, newly fortified by recent attacks on Mr Hawke's major technical prop, the Slatyer report (see *Nature* 309, 647; 1984), and the appearance of other commentaries condemning the export of yellowcake, even under strict bilateral and multilateral safeguards.

The new policy means that the two existing Northern Territory mines, Ranger and Nabarlek, may negotiate new export contracts and that development may begin on the giant Roxby Downs ore body in South Australia.

If French underground nuclear tests in the South Pacific do not end soon, the policy also carries with it a commitment towards implementing a halt to uranium shipments to France, the next of which is due in October. The uranium export industry will be worth an estimated \$A360 million this year, rising, according to the Slatyer report, to as much as \$A1,000 million by 1993.

Jeffrey Sellar