EPA Hard Hit by Budget Cuts

Agency faces major reductions in money and staff despite growing responsibilities for toxic chemicals and waste

In the Reagan Administration science has generally assumed the role of following policy rather than providing a basis for it. Nowhere is this more in evidence than at the Environmental Protection Agency (EPA), which is being subjected to what many regard as devastating budget reductions at a time when the variety of laws it administers will place a sharply increased work load on the agency.

In the new fiscal year (FY) 1982, which began on 1 October, the EPA's budget is heading for a reduction from $1.4 billion to $1.16 billion, and plans for FY 1983 would bring it down to $975 million. And the agency staff, now numbering 10,381, is supposed to shrink to 8340 by the beginning of FY 1983. When inflation is taken into account, EPA purchasing power is likely to be reduced by 60 percent for the first 6 months of the Reagan Administration. The percentage is even higher for EPA's research and development activities, slated to go from $365 million to $296 million appropriated for FY 1982, with another slide down to $220 million the following year.

In other words, Reagan is following his campaign promises with a vengeance. EPA was named as a prime target in campaign antiregulation rhetoric. Said then-Representative David Stockman, now director of the Office of Management and Budget: "You need a whole new mindset down at EPA or you're not going to do anything about regulation."

There is definitely a new mindset at EPA. Both the policies and the operating style of President Reagan's appointee to the top EPA post have drawn harsh criticism from environmentalists and former EPA officials. Agency morale is said to be at an all-time low. The new administrator, Anne M. Gorsuch, is said to have cut herself off from career bureaucrats and surrounded herself instead with advisers of limited experience. The agency was shaken in September by the resignation of two top-ranking officials, policy planning head Nolan Clark and associate administrator Frank Shepherd. Nolan said that his departure was due to "irreconcilable differences of style" with the administrator, apparently a reference to Gorsuch's decision to remove more than 50 senior bureaucrats. Gorsuch is said to be promoting an adversary atmosphere at EPA by failing to consult with career professionals on major decisions. She is also proving elusive on Capitol Hill: a House environment subcommittee had to threaten her with a subpoena in order to elicit a promise to testify at hearings on hazardous wastes scheduled for 21 October.

Barring a new mood of defiance by Congress, the EPA is slated to suffer severe weakening of all its functions—enforcement, regulation, monitoring, and research. Most severely affected will be projects to identify, control, and dispose of toxic substances. Enforcement is still in the early phases for three mammoth pieces of legislation. The Toxic Substances Control Act (TSCA) and the Resources Conservation and Recovery Act (RCRA) were both passed in 1976, but regulations were not issued for either until last year. Third, there is the "superfund" legislation, designed to pay for the cleanup of hazardous waste dumps. Retrenchment in these programs comes at a time when a new General Accounting Office report has found serious inadequacies with EPA's performance under RCRA. The report said that most waste facilities fail to comply with existing interim regulations and that EPA has inadequate staff involved in monitoring and enforcement.

A former EPA official who served under President Carter, says that developments at EPA amount to no less than a "tragedy." William Drayton, former assistant administrator and top budget officer at the agency, says that the Reagan-Gorsuch budget is, in effect, a "reversal of a fundamental societal decision to control the side effects of the chemical revolution." Drayton says that all the basic environmental laws have been modified in recent years to include explicit responsibility for controlling toxic substances. He estimates that EPA's work load relating to toxic materials will have to double in the next few years in order to cope with the thousands of new chemicals that pour into the environment every year.

The Reagan Administration also wants to cut back on funds for the Clean Air Act and the Clean Water Act, both of which require reauthorization next year. This means relaxation of standards and timetables for pollution reduction as well as cutbacks in enforcement staffs. It will also mean less money to the states at a time when the Administration is professing a desire to turn primary responsibility for environmental regulation over to the states. Grants for state water programs, for example, are scheduled to be cut back from $86 million in FY 1982 to $46 million the following year.

What really alarms supporters of EPA are the proposed cutbacks in the agency's research budget. The Carter FY 1982 budget contained a minor reduction in research funds, reflecting the completion of major regulatory efforts; now Reagan wants to cut research moneys from $365 million in FY 1981 to $220 million in FY 1983. According to a House staff member, the biggest cut will be in the development of pollution control technologies in the field of energy, particularly synfuels and coal. The next biggest cut will be in research on water issues, such as the identification of toxic substances in water, the establishment of drinking water standards, and the monitoring of water quality.

The Reagan Administration came into office asserting that environmental regu-

> The Republicans took office saying there was not enough science to back regulations. Now they are pulling back on both fronts.

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lations had been put into effect without good scientific data to support them. Now, instead of beefing up the science, they are pulling back on all fronts. Says Drayton, "We were on the cutting edge of one of the most critical learning curves in our society. Now we are destroying our capacity to understand what we are doing, let alone do anything about it." Douglas Costle, the EPA administrator under Carter, has expressed the fear that proposed cuts will "cripple" the agency so that it may take "at least a decade to recover."

Now even staunch supporters of Reagan have been voicing dismay over the perceived dismantling of an agency that many thought had earned a permanent niche in the federal landscape. Most telling perhaps are recent remarks made by Dan W. Lufkin, former commissioner of environmental protection in Connecticut and the man who headed Reagan's environmental task force during the campaign. In an open letter to the President, Lufkin, a Republican, businessman, and States' Rights advocate, accused the Administration of an approach to environmental regulation that was "at best extreme and at worst bizarre." Wrote Lufkin: "What the Administration is doing in environmental affairs is crazy."

The Senate Environment and Public Works Committee, disturbed by cries of alarm over proposed budget cuts, interrupted action on the Clean Air Act to arrange for a hearing on the matter on 15 October. In a letter inviting Gorsuch to testify, committee chairman Robert T. Stafford (R–Vt.) said he had "considerable concern about the continuing ability of EPA to perform its statutory duties" if major cuts are made.

—CONSTANCE HOLDEN

Weapons Builders Eye Civilian Reactor Fuel

A laser isotope separation process could make plutonium from spent fuel suitable for bomb production

The Defense Department's plans to build a new generation of nuclear weapons in the 1980's will require a major increase in the production of bomb-grade plutonium. So great is the demand that, even with defense reactors running at full capacity, some analysts have predicted that shortages will appear by the end of the decade. Consequently, officials in the Department of Energy (DOE) have been eyeing a source of plutonium that has previously been politically and technologically off limits: the spent fuel rods from commercial nuclear reactors.

Although DOE officials insist that there are at present no firm plans to use commercial wastes for weapons production, there are several indications that such a possibility is under serious consideration. In particular, DOE has recently stepped up work on a key program to separate plutonium isotopes. This will be essential to upgrade plutonium from commercial wastes to the quality required for use in weapons. Moreover, DOE officials, including Secretary of Energy James B. Edwards, have recently been floating the idea in public pronouncements.

The very idea of linking the commercial nuclear power program to weapons production has provoked a storm of protest in the United States and abroad. If carried out, it would end three decades of careful separation of military and civilian nuclear programs. "The whole notion goes against our nonproliferation policy," argues Gerard C. Smith, former chief U.S. negotiator at the Strategic Arms Limitation Talks. By essentially turning its own power reactors into bomb factories, the United States would find it difficult to dissuade other nations from using their peaceful nuclear programs for military purposes, opponents of the move argue. Even the nuclear industry is wary of the idea, for it would almost certainly breathe new life into the antinuclear movement.

The demand for weapons-grade plutonium will rise sharply in the next few years as a result of plans to build a new generation of compact warheads for cruise missiles, neutron weapons, MX missiles, and Trident rockets. A majority of existing bombs and warheads use uranium-235 as the fissile material, but the new weapons will be based mostly on plutonium because plutonium explosives can be made smaller in size. Insufficient plutonium will thus be available from obsolete weapons, and production will have to be stepped up, according to testimony delivered last March before the House Armed Services Committee by Charles F. Gilbert, acting deputy assistant secretary for nuclear materials in DOE. In addition, demand for tritium will rise, partly because large quantities will be required for neutron warheads, which are believed to rely on a deuterium-tritium fusion reaction triggered by a plutonium explosion.

Defense analysts have warned for some time that weapons-grade plutonium may be in short supply in the late 1980's, and in its final months the Carter Administration adopted plans to boost production. The three reactors currently in operation at DOE's Savannah River plant in South Carolina are being increased to full power and a fourth, which was shut down in 1968, will be restarted in 1984. Another reactor, the so-called N reactor at Richland, Washington, is being converted from the production of fuel for the breeder program to the manufacture of weapons-grade plutonium (*Science*, 19 January, p. 146).

These initiatives were reckoned to be sufficient to meet demand for the weapons program as it was then envisaged. But the Reagan Administration's plans for a more rapid military buildup may increase the requirements for weapons-grade plutonium. Hence the interest in wastes from the commercial nuclear power program.

Some 70 tons of plutonium are contained in spent fuel rods from power reactors. These are now being stored in pools at reactor sites around the country, awaiting either reprocessing or a more permanent means of disposal. Speaking at a meeting of the Energy Research Advisory Board on 3 September, Edwards said he would like to see the fuel reprocessed. "There are so many advantages to reprocessing," he argued. "One of the advantages, for example, is that we are going to be needing some more plutonium for our weapons program, and the best way I can see to get that plutonium is to solve your waste problem. Reprocess it, pull out the plutonium."

This was not the first public expression of interest in using commercial

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