EPA's Troubles Reach a Crescendo

The infighting and ethical problems that drove Burford from office also damaged EPA's research program

The Environmental Protection Agency has been in turmoil for the past 2 years. This article examines the impact on the agency's research and development. The following article looks at some of the allegations of conflict of interest among top EPA officials.

When Anne (Gorsuch) Burford resigned as administrator of the Environmental Protection Agency (EPA) on 9 March, she left behind an agency wracked not only by the controversy that led to her departure but also by months of funding constraints and policy upheavals. Her resignation will not put an end to EPA's troubles.

Burford has been replaced for now by her deputy, John Hernandez, formerly a civil engineer at New Mexico State University. On his first day as acting administrator, Hernandez announced that his first priority was to "get this agency back to work." To the extent that he meant back to business as usual, the news was not entirely cheering for EPA's technical staff, for although most of the controversy has involved the toxic waste cleanup program and allegations of favoritism toward businesses linked with EPA aides (see page 1404), EPA's Office of Research and Development (ORD) has had its own share of turmoil.

The 2 years of Burford's rule have been marked by harsh budget cutbacks and sharp disagreements about how diminishing funds should be spent. Most distressing for those who would like EPA to become a credible defender of the environment are the signs of intellectual retrenchment. EPA's research effort has been hurt by the funding cuts. It has also suffered from a changing leadership, a narrowing of purpose, and a preoccupation with in-house politics. EPA's territory has always been charged with political concerns, and its scientific work has reflected this fact of life. Indeed, Burford and Hernandez often said they aimed to improve the quality of technical work at EPA and isolate it from politics. However, many believe conditions are now worse than when Burford arrived.

It is possible to get an impression of the troubles that have plagued the agency by looking briefly at three areas: the quality of research management, changes in the substance of research, and relations between policy-makers and scientists, particularly as reflected in the science advisory groups.

Whenever there is a change of administration, troubles arise. They are likely to be intense if, as in this case, the new managers try to cut budgets by 20 percent a year. The problems of the Burford administration went beyond the level of ordinary transition trauma, however. Consider the most basic of all things, the choice of a leader.

Burford was named head of EPA in March 1981, but did not choose a chief of research until midyear. In June, the agency recruited Andrew Jovanovich, a scientist from a consulting firm called the Denver Research Institute. According to congressional investigators, Jovanovich did not realize until he appeared at headquarters on 15 June that he had been chosen to run the 2000-member ORD.

> New EPA policy: "Research not directly linked to regulatory needs has been eliminated."

Jovanovich quickly became embroiled in controversy, again according to congressional staffers, because he wanted to cut the headquarters management staff rather than take funds from regional laboratories. He was told to plan a 20-percent reduction in the ORD budget but found it virtually impossible to get the data he needed from the staff. Within months, Jovanovich found himself under investigation for charges that he had circumvented EPA's peer review system to give a contract to a friend at MIT.

Although the charges were never resolved, Jovanovich stepped aside in December 1981. Burford had planned to replace him with Peter Krenkel, dean of engineering at the University of Nevada at Reno. However, according to one former and one current EPA official, Krenkel failed to pass a routine federal personnel check. Among other things, it became known that he had been fired as director of the Tennessee Valley Authority's office of environmental planning in 1977. Krenkel has said that he withdrew his name from consideration in December 1981 for personal reasons.

Krenkel's influence at EPA continues, however. Before withdrawing, he made a study of EPA's research organization and apparently brought about some management changes. In March 1982, he was hired as consultant to a committee planning a thorough reorganization of ORD. This plan may be put into effect soon. Among other proposals, it would elevate five of EPA's 13 research centers to "superlab" status and downgrade the others, perhaps to the status of field stations. Some staffers in the soon-to-be field stations worry that their projects may be on the way out. Needless to say, the uncertainty has further undermined morale, already at a low ebb because of the confusion and budget cuts being made at headquarters.

When Krenkel withdrew, his place was taken by a career employee of the agency, Courtney Riordan, a civil engineer. He has been acting director of ORD since then, and just a few weeks ago was nominated as permanent assistant administrator of ORD. Senate confirmation hearings have not been scheduled. However, if a new EPA chief is named, the process of finding an ORD chief may begin again. It is difficult to do any constructive work when the leaders, the objectives, and the finances are constantly changing.

Changes in leadership have been damaging to morale, but EPA's financial vagaries have been more disruptive to the agency's research. In gross terms, Burford oversaw a reduction in R & D spending between 1981 and the proposed 1984 budget of nearly 50 percent. During this period, EPA's overall staff has declined by 12 percent or more. The reductions were more disruptive than the numbers may suggest, for they were made in a chaotic manner. The trouble began when Burford decided to rescind over $100 million of planned expenditures in 1981. Congress disallowed the rescission, but according to EPA staffers, some of the targeted projects never quite

recovered. The money was not returned in all cases, but spent instead on short-term needs.

The pattern was repeated in other areas. Burford's chief of administration, John Horton, now dismissed, placed a "tap" on unspent reserves in several categories in order to meet immediate costs, EPA staffers say. An official at headquarters who would like to remain anonymous gives this account: "The game was to keep squeezing the EPA budget down, and to borrow from Superfund [the account for cleaning up toxic dumps] and from rescinded funds" which had been confiscated. When Burford and Horton decided to rescind programs in 1981, "Horton took all that money into his office. It took months and months to get it released," even though Congress intervened. For some research projects, "the funds were never returned." The impact was crippling, even for projects that eventually did get refunded. It was never clear, the EPA official says, whether commitments made to outside researchers could be honored, for the funds might not be in the account when it came time to make payments.

The pattern is perhaps best documented in an EPA inspector general's report on Superfund. The report, dated 11 February 1983, was signed by Matthew Novick, dismissed several weeks ago by Burford before she herself resigned. Superfund was created as part of a 1980 law that taxed chemical producers in order to finance a cleanup of waste sites. Congress stipulated that these funds could be used for no other purpose. Nevertheless, Novick's report finds that of about $180 million in the account in 1982, more than $53 million could have been misspent. The documentation for the fund's use was so poor that Novick could not be sure how it was used, although some was clearly spent on routine EPA operations.

In addition to juggling accounts, EPA's top officials made a substantial policy decision in 1981 that affected the type and quality of research. An old objective—linking ORD more closely to the regulatory offices—was converted to a new strategy: funding only research linked directly to regulations. Although not described this way, the policy seemed to be aimed at avoiding costly new fixes by shortchanging research on new problems.

Lester Lave, a Brookings Institution scholar who specializes in environmental economics, calls this policy "flying blind." Riordan described it in 1982 for *National Journal* as follows: "There is a narrowing of focus to conduct research for identified needs in support of regulations. The shift is being motivated by good management that is opposed to the pursuit of something for its own sake. Our job is to determine what the environmental standards should be and then enforce them." A 1983 EPA budget document puts it bluntly: "Research not directly linked to regulatory needs has been eliminated."

Wide World

Changing the guard

Burford leaves EPA in the hands of her deputy, John Hernandez, the day after her resignation. Burford left after the Justice Department informed her it would cease representing her in a contempt-of-Congress proceeding. She had withheld EPA records from Congress, invoking executive privilege. The records have now been surrendered.

The proposition seems straightforward, but, as Lave points out, environmental problems are not so simple or predictable. One simple regulatory answer to air pollution in the 1970's was to build tall smokestacks and disperse the pollutants. More aggressive research might have discovered what appears true today, that tall stacks inject the pollutants into the atmosphere, where they contribute to the more widespread problem of acid rain. Lave argues that it might be possible to avoid similar blunders in the future, and save money, by doing more exploratory research now.

The new research rule has another pernicious aspect. Being vague, it may be applied loosely to any kind of work that happens to be out of favor. Consider the experience of a research chemist at one of the regional laboratories. His work is regarded as being of high quality, although also highly controversial. He prefers to remain anonymous because he has already been penalized for speaking to the press about it. It bears on a major policy issue.

The chemist reports that his multiyear project was nearing completion in 1982 when the highest officials at EPA intervened and ordered that it be cut short. Funding was reduced drastically and parts of the project were assigned to another laboratory, "where they have nobody who can do the work." Other parts were killed. Meanwhile, he says, "The lab director says we can't look at anything that's going to generate new problems." Instead, "We're going to tie up the freest dollars in EPA on mundane work, solving old problems, essentially doing a restudy" of classic research done several years ago. He says, "It's hard. . . . You get the feeling you're being asked to design experiments to create questions rather than answers."

Critics also point to two other research projects which are being cut back, despite the fact that in these cases the work seems directly related to regulation. One is the National Crop Loss Assessment Network (NCLAN), which in 1980 began coordinating data on the effects of air pollution on plants. Riordan explained in hearings recently that NCLAN is being phased out soon because it ought to have gathered all the data it needs by 1984. Yet pollution and crop losses will still be with us, and they could change after next year.

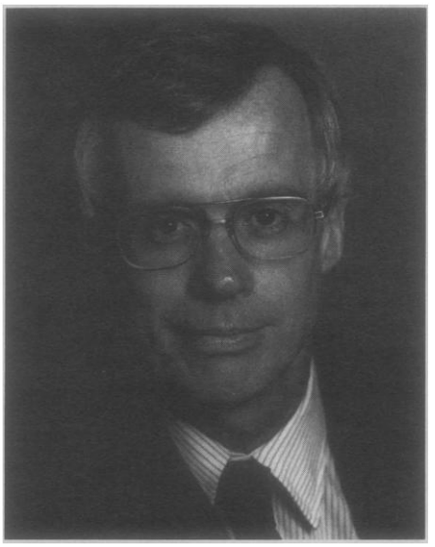
Second, $17 million is being taken out of EPA's environmental engineering program in the 1984 budget. This research aims to develop new technologies for treating pollutants, particularly ideas which industry has ignored. One engineer at the laboratory in Research Triangle Park, N.C., says, "Everything's affected. . . . This pretty much puts us out

of the development business." Pilot projects will continue, but they offer less credible proof of efficacy.

Riordan explained that the reason for the cut was that private industry should do this work. But industry's investment record has been poor, for the profits to be reaped on incremental engineering changes are slight. This is why Congress created the program, knowing that as new control technologies become available, it is possible to enforce higher air quality standards.

These are some of the substantial changes in research policy since 1981. Subtler but equally important changes have occurred in relations between the administrators at EPA and the scientists. For example, nothing could alienate the scientific community more effectively than a document leaked to Congress by someone at EPA on 1 March. It was a "hit list" of experts rated according to their willingness to bend to the Administration's views. It appeared to be a survey of industry opinions and may have been used to screen candidates for the Science Advisory Board (SAB) and for consulting jobs (*Science*, 18 March, p. 1303).

This news outraged Robert Sievers, a professor of chemistry at the University of Colorado at Boulder. He was unfavorably reviewed on the list and was dropped this year from the SAB. One of the few who would speak for attribution, Sievers issued a two-page statement of protest. He writes: "Many dedicated, highly competent EPA scientists are living in fear of losing their jobs." Academics, he says, are becoming suspicious of the way grants are awarded. "We decry the situation in Russia where scientists of the wrong religion or political leanings become non-persons, unable to obtain support for their research or even for their livelihood. How can we ignore the first ominous indications of a similar trend in our own bureaucracy?" he asks. Although this Administration may consider him too much an activist, Sievers says, he is frequently criticized for being conservative. "I think I'm square in the middle of the road."



Courtney Riordan

EPA's chief of research

EPA officials deny that the hit list was used, but many scientists whose names appeared on it think otherwise. They point out that when Burford came into office, something new happened. For the first time, all members of the SAB were asked to submit resignations. Most were reappointed, but only for a 1-year term while the advisory structure was being reorganized. Now that the interim year has passed, it appears that most with negative reviews on the hit list were dropped. However, following the bad publicity occasioned by the hit list, EPA is planning to reinstate some of them.

Several SAB members who said they had not noticed a purge say they did notice something else: an unwillingness to make any substantial use of the scientists whom EPA brings to advisory meetings. The common complaint is that the agency seems to use them only for decoration, despite the many promises to take their criticism to heart.

If this record is depressing for environmental activists, it is just as discouraging for President Reagan's constituency. As Lester Lave says, "It's not pro-business; it's just dumb." Thomas Bath, a former executive director of the SAB who describes himself as a conservative Republican, says simply that it has been "a wasted opportunity." He believes, and many academic members of the SAB would agree, that there is ample scientific evidence—had EPA been willing to develop it—to justify a conservative approach to regulation. Instead, EPA's leaders provoked a political storm and "ended up wearing the black hats."

—ELIOT MARSHALL

Congress Investigates Malfeasance at EPA

Allegations of perjury, unethical conduct, conflicts of interest, and political manipulation are swirling about top agency officials

Steven Durham, a regional administrator with the Environmental Protection Agency (EPA), surprised his staff in September 1981, when he decided not to approve some stringent new standards for water quality developed by the state of Colorado. Previously, Durham had indicated that the standards were acceptable. But on the expected date of approval, Durham begged off, seeking more data and some revisions.

Shortly before his decision, Durham chatted on the telephone about the standards with James Sanderson, a consultant and close friend to EPA administrator Anne Gorsuch Burford in Washington. Sanderson is employed full time by a law firm in Denver, where he represents clients that had filed suit against the state, claiming that the proposed water standards are too tough. Although both men have denied it, Durham's last-minute change of heart has been widely attributed to the call from Sanderson, who was allegedly using a position of authority in Washington to benefit his private clients, thereby enriching himself.

This sequence of events and many others like it have led to intense congressional scrutiny of EPA in recent months. The resulting allegations of wrongdoing, unethical behavior, and potential criminal conduct combined to generate the pressures that culminated in Burford's resignation on 9 March. Although the scandal appears to embrace more employees and more events each week, there is a central argument in all the criticisms—namely, that Burford and most of her appointees either lacked or somehow quickly lost the ability to distinguish public interest from private gain.

Five congressional subcommittees are examining whether and to what extent EPA officials or their friends prospered illicitly during Burford's tenure. No one has yet been formally charged with a