

very essence of their usefulness. "We have to be able to tell the Air Force just what we think," one official commented recently, "and to do that we have to have a little room of our own to think in, a personality of our own, and money of our own to play with." The tension between the Air Force and Aerospace officials at contract-negotiation time has grown essentially out of the paradox that Air Force negotiators have attempted to impose their own rather austere standards on Aerospace when it is in part that austerity that has made it necessary to create an outside organization to do the job. The position of the Air Force

committee is that there is a trade-off between independence and stability. "As intimate members of the Air Force Systems Command management team," the report says, "[the nonprofits] must forgo some part of normal corporate independence. This is the price of whole-hearted acceptance of the Corporations by the individuals and agencies for whom they work, and by those whose decisions influence the Corporations' future. Moreover, acceptance and appreciation of the vital roles of these Corporations is the only key to assuring their stability. Other symbols of stability, such as buildings and accumulated assets, are at best a facade

and at worst, can detract from acceptability. Acceptance must be earned by the Corporations not only by demonstrated technical accomplishments, but also by the attitudes and business practices of corporate management." What is called for, essentially, is compromise—and, to judge from the warmth with which most officials of the nonprofits have greeted the report, they appear to feel that a compromise has been laid out which will not affect their basic character or threaten their basic interests. For this they have largely to thank the axiom of this technological age, that war is too sophisticated to be left to the generals.—ELINOR LANGER

## Water Pollution: New Agency Moving from HEW to Interior

Although it is not yet time for the hurrahs of conservationists, who often have felt dismay and frustration at the extent of pollution and the inadequacy of control efforts, federal activities in the antipollution field may gain a clearer sense of direction and a fresh momentum in the next few weeks.

On 10 May the Federal Water Pollution Control Administration (FWPCA) will be transferred from the Department of Health, Education, and Welfare to the Department of Interior. Sometime thereafter, an internal reorganization will be undertaken within FWPCA, a new agency provided for by Congress last year as the successor to a division of the U.S. Public Health Service. This reorganization, though supposedly designed to promote greater efficiency, seems likely to produce a round or two of bureaucratic infighting before everyone has settled down to the job at hand.

FWPCA's transfer to Interior will be made under an executive reorganization plan which President Johnson submitted to Congress in March, to become effective within 60 days unless disapproved by either House. The plan has been searchingly examined and has drawn some critical comments, but no serious opposition. A resolution of disapproval

introduced last week by a Republican congressman is expected to get short shrift.

Almost immediately after FWPCA moves to Interior, Secretary Stewart L. Udall is expected to issue guidelines for states to follow in preparing water quality standards, an essential element of the new federal scheme for pollution control. FWPCA Commissioner James M. Quigley says, "The guidelines are coming out, I hope, if not the first day, the first week we are in Interior."

Water quality standards were provided for by the 1965 amendments to the Federal Water Pollution Control Act. The states have until 30 June 1967 to prescribe acceptable standards; thereafter, the Secretary of the Interior may prescribe standards for states which have failed to act. Prompt announcement of the guidelines will be necessary if states are to meet the deadline. Already there is concern that the states will press for, and get, an extension of time, thus delaying for another year or so an essential step toward cleaning up their streams.

Commissioner Quigley indicates that new abatement actions will be initiated within the next few months, once Secretary Udall has had time to review

those cases of "gross pollution" where immediate federal intervention seems justified, even though the states have not had time to prescribe water quality standards. "I'm sure there are a half dozen situations, probably more, which are so bad that we should not wait before moving," Quigley told *Science* last week.

The federal abatement program has been on dead center since last September, when the last abatement conference (for the Hudson River) was called. FWPCA's enforcement specialists say that pollution is bad enough in some 80 situations to warrant federal intervention under existing law. Quigley attributes the failure to call any new abatement conferences since September to the two major reorganizations—the breaking of ties with the Public Health Service and now the move from HEW to Interior.

The plan for the transfer to Interior has been under review by Government Operations subcommittees of the House and Senate. The Senate subcommittee happens to be chaired by Senator Abraham A. Ribicoff, who, as a former Secretary of HEW, was once responsible for the antipollution program. A member of the Ribicoff subcommittee is Senator Edmund S. Muskie, chairman of the Senate Subcommittee on Air and Water Pollution and a leader in the antipollution fight. While Muskie and Ribicoff have reservations about moving FWPCA to Interior, they seem to take the position that, in carrying out the antipollution program which Congress has enacted, the President should be permitted the administrative arrangements he thinks appropriate.

Moreover, Interior, a relatively small department eager to take on new responsibilities, wants FWPCA badly, whereas HEW, a huge department with a baffling diversity of missions, is not reluctant to lose it.

Muskie and Ribicoff have been at pains, however, to establish a hearing record which serves notice on the administration that they are alert to possible difficulties for FWPCA in Interior. Ribicoff, drawing on his own staff and that of the Muskie subcommittee, set forth a number of objections to the transfer plan.

For example, he said "within Interior are constituent agencies whose own constituencies are comprised of the most flagrant polluters in the nation—mines, pulp and paper, oil and gas, to name a few." Later, he added, "Should we combine the promoter and the regulator? An analogy would be to put FDA's food responsibilities in Agriculture on the basis that the latter's prime interest is food."

Furthermore, Ribicoff said that "Interior is basically a western, non-urban oriented institution while the problem of water pollution is most prevalent in our highly urbanized and industrialized north and east." The senator warned that the transfer will delay the establishment of water quality standards. He indicated that, taken altogether, there are enough drawbacks to the transfer to make it undesirable, particularly in view of the fact that the plan does not bring all the government's pollution-control programs into Interior. For instance, Ribicoff said, the Department of Housing and Urban Development will keep its grants-in-aid program for sewer construction.

Secretary Udall, replying to Ribicoff recently, spoke for HEW and the Bureau of the Budget (which had a part in planning the transfer) as well as for Interior. Udall said that conflicts between conservation and commercial utilization of natural resources constantly confront the Secretary of Interior. "These conflicts exist now," he said. "The alignment of interests will not be changed by the President's proposed transfer. In fact, the interests most concerned about water pollution control should find some new and additional associates and supporters—even within industries most blamed for pollution."

The Secretary said that pollution control would become one of Interior's ma-

ior activities and that he would devote at least a fifth of his time to it. Moreover, Udall has said that if the new assistant secretary (as yet unnamed) who will be assigned to oversee the program does not devote himself exclusively to pollution control, his additional duties will be confined to things, such as the water desalinization program, which are closely related to it.

Interior's orientation, though historically western, has been changing, Udall said. "Its preoccupation with western programs is shrinking, relatively, and also in the absolute sense," he said. The urban resident is the principal constituent of many of the department's bureaus—the National Park Service, the Fish and Wildlife Service, and the Bureau of Outdoor Recreation, for example.

The Secretary pointed out that he is chairman of the Water Resources Council which was created by Congress last year and given the responsibility of coordinating federal water policies. In addition, he is a member of the Delaware River Basin Commission, along with the governors of New York, New Jersey, Delaware, and Pennsylvania. While the transfer would not bring all water pollution control functions within Interior, Udall said, it would be a sensible, logical step—relating pollution control more closely to the overall water resources management program. As for the possibility of a delay in the establishing of water quality standards, the Secretary promised to do his utmost to move the program forward and prevent avoidable delays.

Representative James L. Cleveland of New Hampshire, the Republican congressman who is opposing FWPCA's transfer to Interior, entertains no hope of preventing it. In fact, his own objection to the plan rests principally on his fear that many of the some 300 PHS officers who have been assigned to FWPCA will leave the pollution control program rather than resign their commissions and accept civil service status. As of 30 April, 108 of the officers had elected to transfer to Interior and 96 had chosen to remain in PHS. The remainder must decide by 30 June whether or not they will transfer. Udall has said that the pattern of these decisions is little affected by the move to Interior, inasmuch as the officers would have faced much the same choice—keeping their commissions and remaining with PHS or accepting civil service status with FWPCA—even if

the agency had remained in HEW. FWPCA is resigned to the loss of many of the officers—a loss regarded as serious but not crippling.

Considerable tension seems to be building up within FWPCA over Commissioner Quigley's plan to reorganize the agency. The plan, which is still tentative pending further review by FWPCA officials and by Secretary Udall, provides for three associate commissioners, three assistant commissioners on Quigley's headquarters staff, and a number of regional commissioners. Murray Stein, who, as assistant chief and head of enforcement, has been the agency's third-ranking official, would be the assistant commissioner for enforcement—a position which, on the face of it, seems less important than the one he presently holds, although Quigley denies that Stein is being downgraded. Quigley was vague and noncommittal when asked last week whether Stein's new rank would be higher or lower than that of the new associate commissioners.

Quigley and Stein were rivals for the commissionership, a circumstance which will encourage speculation that Quigley now seeks either to relegate Stein to an inferior status or drive him out of the agency. Stein's role in the antipollution effort has been especially prominent. It has been Stein's office which has initiated abatement actions, and Stein himself has presided over the abatement conferences. His name is identified by conservationists and polluters alike with a tough enforcement policy. His departure from FWPCA, should it occur, would signify to some that the agency was losing its most effective man.

Senator Ribicoff and Senator Muskie have questioned Quigley about his reorganization plan, particularly about whether or not it would mean that the enforcement office no longer had the ready access to the technical services which is needed in bringing abatement actions. Quigley has promised that the enforcement unit would have on its own staff the technical people needed for its day-to-day work, and that additional technical support would be readily available from the technical programs bureau (which would be headed by an associate commissioner). Up to now Stein has been assured of the willing assistance of the agency's technical people; many of them owe their salaries to his budget even though they do not work for him directly.

With or without Stein's help, Quigley

will face the formidable task of directing an antipollution effort which is still a long way from success. His own past record has its bright spots, but no one holds that it has been crowned with glory. Before being named commissioner, Quigley was an assistant secretary of HEW, responsible for the department's international affairs and civil rights activities as well as for its air and water pollution programs. An ex-congressman from Pennsylvania, Quigley was named assistant secretary in 1961 and served in that capacity under HEW secretaries Ribicoff, Celebrezze, and Gardner. All but about 15 of the 37 abatement conferences called in the history of the federal water pollution program were initiated while Quigley, under the secretary, was responsible for the program. The pace set during

his tenure was by no means furious, however, nor did it tax the capacity of Stein's enforcement office to its limit.

Some strategically placed observers feel that Stein's office was never really given a green light to initiate abatement actions. On the other hand, the failure to press harder is attributed perhaps not so much to Quigley as to other factors. The secretaries of HEW, beset with multiple duties, have been able to devote comparatively little time to the pollution control program. Quigley's own time has been divided between pollution control and other matters. Also, having the pollution control vested in the Public Health Service is considered by many, in Congress and elsewhere, to have retarded effective enforcement. Traditionally, PHS has relied heavily upon close and harmoni-

ous relationships with state health officials, who not infrequently have been accused of tolerating polluters. Moreover, the pollution control program is said to have been often under heavy political pressure from members of Congress, governors, and others interested in seeing it go slow.

Altogether, the circumstances under which the antipollution program can now proceed seem a good deal more favorable than those which existed in the past; this assumes, of course, that FWPCA will organize itself quickly and not become ensnared in bureaucratic feuding. The political pressures now seem increasingly on the side of the antipollution—a fact which should be reflected in an increasingly vigorous program of abatement.

—LUTHER J. CARTER

## Fish Flour: FDA Approval Likely on Improved Product

Fish flour, the fish protein concentrate which caught the administration's attention in 1962 as a promising answer to protein deficiencies in underdeveloped nations, is appearing on Capitol Hill legislative menus again this spring.

Since January 1962, when a domestic manufacturer's whole fish product received the label "filthy" from the Food and Drug Administration (FDA), the Bureau of Commercial Fisheries, in the Interior Department, has been actively conducting research on the product. Now it believes it has results that can successfully challenge FDA's original disapproval. An application was filed with FDA on 2 March, which officially gives the agency 180 days to hand down a decision on the product.

While awaiting the FDA decision, congressmen are introducing bills to provide for further research on fish protein concentrate. The procession of current bills on fish flour began last fall when senators E. L. Bartlett (D-Alaska) and Warren G. Magnuson (D-Wash.) introduced S. 2720 to authorize \$5

million for construction of up to five experimental plants for producing fish protein concentrate; the bill was referred then to the Committee on Commerce. The provisions of the bill would authorize the Secretary of Interior to undertake feasibility studies of large-scale commercial production of the concentrate and to construct and maintain the experimental plants. Perhaps encouraged by reports that an FDA ruling favorable to the Interior Department would clear the way for commercial development of the product, the Commerce committee scheduled two hearings on the bill. The first was held 25 April in Aberdeen, Washington; the other is set for 16 and 17 May in Washington, D.C.

The odorless, colorless fish protein concentrate, made from whole fish and designed to be a protein-packed food additive, has long been enmeshed in legal and administrative difficulties. After FDA's 1962 ruling on a fish protein concentrate made of whole fish—guts, gills, and all—produced by the Vio-

Bin Corporation of Monticello, Illinois, a National Academy of Sciences study was begun at the request of the Interior Department, whose Bureau of Commercial Fisheries also saw fish flour as a new and sizable source of income for the troubled American fishing industry. The study concluded that fish flour did not deserve the FDA "filthy" label but noted that more research on fish flour was needed, to control the quality and the solvent residues from the production process.

Given that pale-green go sign, the Bureau undertook an extensive research program at its laboratories at College Park, Maryland. Under the direction of E. R. Pariser, the research and testing was done at the laboratories until preliminary results indicated that a high-protein concentrate could be made from whole fish and still be pure. One of the low scoring points of the early fish flour made from whole fish was that such a product certainly couldn't be pure if all of the fish innards were used. However, the process of cleaning the fish would be too costly a matter to be feasible. Now the Bureau is producing a fish protein concentrate that has been tested as pure.

Secretary of Interior Stewart Udall instructed Donald L. McKernan, director of the Bureau of Commercial Fisheries, to accelerate the work at a pilot processing plant built in nearby Beltsville, Maryland. The plant is designed, Pariser says, "to make reasonable quan-