

discussion of alternatives, the only allusion to HARPIN was the observation that the AEC had advised "that nuclear destruction is unsatisfactory." However, the Army had in fact asked the AEC for permission to include a copy of the HARPIN study in the impact statement. The Army had been informed that, if inclusion of the study was "mandatory," the AEC would sanction the use of the HARPIN document in a new version—one from which mention of the public relations aspects of HARPIN had been deleted. The AEC had asked that its strong opposition to HARPIN be emphasized and that the earlier study document be destroyed and that the new one be given as "little distribution as possible."

The Army's impact statement minimized the possibility of major environmental damage resulting from Operation CHASE. However, field studies of the earlier disposal of nerve gas had been extremely limited, although laboratory studies of questions such as the hydrolysis rate of the GB agent in salt water had been extensive. (A monitoring program will soon be undertaken at the site of the August dumping; no contamination was detected in water samples collected shortly after the hulk went down.)

The impact statement indicated that, to assume the worst possible case, the GB agent would contaminate 1 cubic mile of water above the sea floor, and this only briefly. However, the CEQ, in a memorandum to the Army prepared by Gordon J. MacDonald, a former member of the President's Science Advisory Committee, said that the impact statement left a number of questions unanswered and that no firm predictions about the effects of the dumping were in order.

For instance, while the Army had assumed that there is little marine life at the 16,000-foot depth and no fish of commercial value, the council said that present knowledge of sea life at that depth is quite incomplete. It then observed:

It is known that carnivorous fishes are found at that depth. Most of the deep water fishes have eggs which rise to or near the surface. Eggs and larvae of other deep sea organisms come to or near the surface. It is believed that many organisms may make seasonal migrations from shallow to deep waters, and from coastal to deep waters. Many commercial fishes, for example flounder, which occur in shallow waters off the southeastern coast of the U.S. migrate into deeper waters in winter. The exact depth limits of some of

these movements are not known. But the point is that there is a possibility that fishes, directly used by man, might pass through the contaminated zone, or might consume other organisms which have come from or passed through that zone. And it should be remembered that there are commercial surface fisheries in the general area [250 miles east of Cape Canaveral] of the dumping site.

Last week, Representative Emilio Q. Daddario (D-Conn.), chairman of the House Subcommittee on Science, Research, and Development, introduced legislation to give the Council on Environmental Quality authority to approve or reject any plan for disposal of military material in the oceans or navigable waters of the United States. Since the President—to whom the council is answerable—already has that authority, this legislation may not be needed. But the byplay between the Army and the AEC prior to Operation CHASE clearly suggests that federal agencies involved in controversial matters of this kind need a big brother.

—LUTHER J. CARTER

## APPOINTMENTS

**Ray J. Weymann**, professor of astronomy, University of Arizona, to head, astronomy department, and director of Steward Observatory. . . . **Leonard D. Policoff**, chairman, physical medicine and rehabilitation department, Temple University Health Science Center, and director of physical medicine, Albert Einstein Medical Center, has been named chairman, physical medicine and rehabilitation department, Hahnemann Medical College and Hospital of Philadelphia. . . . At Northwestern University Medical School, Chicago, **Leslie T. Webster, Jr.**, associate professor of pharmacology and assistant professor of medicine, Case Western Reserve University, to chairman, pharmacology department; and **William Bondareff**, acting chairman, biostructure department, elevated to chairman of the department. . . . **Sydney R. Parker**, professor of electrical engineering, University of Houston, to chairman, electrical engineering department, Naval Postgraduate School. . . . **Robert A. Ellis**, former professor of sociology, University of Oregon, to chairman, sociology department, University of Maryland. . . . **M. A. Rouf**, professor of microbiology, Wisconsin State University, Oshkosh, to chairman, biology department at the university. . . .

At Princeton University, **Sheldon Judson**, Knox Taylor Professor of geography, to chairman, geological and geophysical sciences department; and **Marvin L. Goldberger**, Eugene Higgins Professor of theoretical physics, to chairman, physics department. . . . **John W. Winchester**, professor of oceanography, meteorology and oceanography department, University of Michigan, Ann Arbor, to chairman, oceanography department, Florida State University. . . . **Campbell M. Gilmour**, director, Center for Environmental Biology, University of Utah, to head, bacteriology department, University of Idaho. . . . **Stanley P. Hazen**, chairman of postgraduate peridontology, Temple University, to chairman, peridontology department, University of Connecticut. . . . **Gordon R. Borr**, acting chairman, chemical engineering department, University of Idaho, to academic dean at the university. . . . **Harold W. Moore**, associate professor of chemistry, University of California, Irvine, elevated to chairman of the department. . . . **Lorin Kennamer**, dean of arts and sciences, Texas Technological University, to dean, College of Education, University of Texas. . . . **Robert P. Boynton**, professor of government and public administration, American University, to dean for graduate studies and research at the university. . . . **William L. Franzen**, professor of education and assistant dean, College of Education, University of Toledo, to dean, School of Education, University of Missouri, St. Louis. . . . **James Heald**, professor of administration and higher education, Michigan State University, to dean, College of Education, Northern Illinois University. . . . **Lewie Burnett**, chairman of education, California State College, Hayward, to dean, School of Education at the college. . . . **Thomas F. Malone**, professor of physics, University of Connecticut, to dean, Graduate School at the university. . . . **Patrick R. Wells**, acting chairman, pharmacology department, University of Nebraska, to dean, College of Pharmacy, Texas Southern University. . . . **Eugene H. Cotta-Robles**, special assistant to the chancellor for academic programs, University of California, Riverside, to chairman, microbiology department, Pennsylvania State University. . . . **John Cross**, assistant professor of psychology, St. Louis University, to chairman, social sciences department, College of the Virgin Islands.