

Civilian Use for Biological Warfare Facility Under Study

The response to word that a federal facility is cutting back or closing down is almost always a rescue attempt. Arkansas officials are making a much more than routine effort to win conversion of the "Biological Complex" at the Pine Bluff Arsenal, a principal chemical and biological warfare arsenal, to civilian uses. And official Washington seems to be giving the matter more than *pro forma* consideration.

Redundancy for the highly specialized facility was implied in President Nixon's 25 November renunciation of biological and bacteriological warfare by the United States. For Pine Bluff, the writing on the wall seemed even clearer when the President, on 14 February, widened the ban to include toxins; these have been produced and stored at the Arkansas arsenal. Toxins are the poisonous products of microorganisms, plants, or animals which may be lethal to humans but are "dead" in the sense that they cannot act as agents for spreading infectious diseases through human or animal populations in the way that live organisms can.

No order for the closedown of the Biological Complex has been issued. But the White House had indicated that the biological warfare section of the arsenal would be turned over to a civilian government agency which could make use of the lab facilities, particularly for work on immunization against disease. The departments of Agriculture and Health, Education, and Welfare are known to have joined with the Defense Department in considering the matter, and Presidential Science Adviser Lee A. DuBridge and his Office of Science and Technology staff are coordinating the interagency discussions. The National Academy of Sciences reportedly provided a visiting team of evaluators.

The effort by Arkansans in behalf of conversion got into high gear after the President's original announcement. Governor Winthrop Rockefeller involved himself personally in the project and appointed a high-powered Governor's Task Force on the Biological Complex, Pine Bluff Arsenal. The task force set out to explore the capabilities of the complex and to make recommendations for conversion "in the context of national ecological needs and problems."

A major difficulty facing the task force was that most of the work at Pine Bluff is classified and details are swathed in security wraps. What is essentially involved, however, is the Pilot Plant DBO (directorate for biological operations), a tall, windowless building in one corner of the arsenal's 15,000-acre reservation some 10 miles from Pine Bluff and 40 miles from Little Rock. The mission of this section of the arsenal has been to produce and store biological and bacteriological warfare agents. Pine Bluff and Fort Detrick, Maryland, complement each other. Detrick was the center of germ warfare research, and the Pine Bluff facility has been concerned with determining how agents could be produced in quantity and how they would behave outside the laboratory.

As the task force noted, the Pine Bluff laboratory staff's strong suit was "developing biological concepts into practical applications." The core of the staff is 53 professionals, who are assisted by some 67 non-degree-hold-

ing personnel. Several hundred other workers apparently are involved in production and storage operations. Investment in the plant is put at well over \$100 million. No inventory of equipment is available, of course, but the facility has been compared favorably with the government's communicable disease research center in Atlanta and with the best of the university high-safety labs for virus research. The lab also has costly special equipment, such as its big fermentation vats, thought to be unique.

Uses to which the facility could be put are suggested in the task force's recommendations submitted early in February. A converted lab, for example, might explore the use of specific pathogens and parasites to control insects, the destruction of pesticides through the use of microorganisms, or the use of insecticides produced by microorganisms through fermentation methods. The report noted, among other things, that the facility was well equipped to carry out toxicity testing of antibiotics, food supplements, biologicals, and insecticides and offered possibilities for professional and graduate education activities in the health fields.

The big obstacle to civilianization at Pine Bluff, of course, is the prevailing shortage of federal funds for new programs. Despite the expansion of interest in preserving the environment, both Agriculture and HEW are having difficulty financing their existing research programs without contemplating expansion.

Partisans of Pine Bluff, however, enjoy some advantages. Conversion of chemical and biological warfare (CBW) workshops to beneficent pursuits would have heavy symbolic value. And, while no explicit commitment was made, the White House has already identified itself with efforts to transfer control of work at Detrick to HEW (*Science*, 19 December 1969) and to find a new role for Pine Bluff.

Influence on Capitol Hill

The Arkansas congressional delegation could be a potent force. Senator John L. McClellan, chairman of the Senate Government Operations Committee, is dean of the delegation and is taking the lead in the congressional effort. The influential Representative Wilbur Mills, Ways and Means Committee chairman, is the senior Arkansan in the House, and Senator J. William Fulbright, who last year chaired hearings on CBW, has declared himself strongly in favor of conversion at Pine Bluff. It is no handicap during a Republican Administration that Arkansas Governor Rockefeller is a Republican governor of a Southern state.

But the decision on Pine Bluff is not an easy one. There are policy problems as well as budget problems since the claims of other research facilities and their partisans must be taken into account. And some of these federal labs are operating under the shadow of the padlock. In one sense there is an opportunity, rare in federal science, to match funds with capabilities. But DuBridge and his colleagues in the agencies have the unenviable job of operating in an atmosphere of political arousal and unprecedented competition for the ecological dollar.—JOHN WALSH