environment occurred as a result of Kit's field experiment. The NIH committee, too, found that a "minimal release" of the Kit virus had occurred as the result of nasal excretion in the treated swine. But the committee again said there are ambiguities in the definition of "deliberate release in the environment" and in what is considered a "contained" experiment. 

MARK CRAWFORD

## USDA Research Rules Killed; NIH Panel to Rewrite Standards

The Department of Agriculture's (USDA) proposed rules governing the conduct of biotechnology research are being abandoned. The decision was made by Orville Bentley, assistant secretary for science and education, in response to complaints by the research community. The rules were part of the Reagan Administration's coordinated strategy for regulating biotechnology research and products. They were included in a larger package of guidelines issued by the Office of Science and Technology Policy and other federal agencies on 26 June.

The Biotechnology Science Coordinating Committee (BSCC), a federal interagency policy panel, formally endorsed Bentley's decision on 20 October. The "USDA Guidelines for Biotechnology Research" were modeled after the National Institutes of Health's rules for research involving recombinant DNA molecules. The department sought to build on upon these rules to tackle agriculture issues related to containment of organisms and deliberate release experiments that NIH had not dealt with adequately to date.

But USDA's definitions, terms, and applications were not always procedurally and scientifically consistent with NIH regulations, which researchers have relied on for years. For example, Administration officials say they received complaints about USDA's proposed addition of containment levels for organisms beyond that required by NIH. Others complained that definitions related to greenhouse containment were unclear. Department officials told *Science* that they knew some definitions were incomplete when the guidelines were published. The decision to drop the proposed rules was first made by the department a month ago.

Bentley says USDA's decision to rely on NIH is aimed at eliminating any confusion. William Carlson, a department administrator who had a lead role in assembling the research rules, says that the department had wanted to use NIH's rules all along. A legal

opinion from USDA's general counsel, however, spurred officials at Agriculture to draft separate rules that expanded upon the "NIH Guidelines for Research Involving Recombinant DNA Molecules."

The action does not affect a separate set of regulations issued simultaneously by the Animal and Plant Health Inspection Service (APHIS), USDA's regulatory arm. These rules govern the introduction of organisms and products altered or produced through genetic engineering that are recognized or potential plant pests (Federal Register, 26 June, p. 23352).

Bentley says the processing of research proposals also will be unaffected by this "clarification action." Existing NIH guidelines will be used in conjunction with established department criteria in evaluating experiments. When updated guidelines are finally adopted—probably a year from now—USDA will administer them.

Officials say it may take 6 months for a working group of the NIH's Recombinant DNA Advisory Committee to update rules to address agricultural research issues related to containment and deliberate release into the environment. The working group is expected to include representatives from USDA's science and regulatory divisions, NIH, NSF, the Food and Drug Administration, and the Environmental Protection Agency. USDA officials say much of the work they have done to date on the agriculture research regulations can be used by the NIH panel. 

MARK CRAWFORD

## Biotechnology Report Clears House Science Committee Hurdles

After feuding over alleged errors and the tone, Democratic and Republican members of the House Science and Technology Committee have approved a report on biotechnology, *Issues in Federal Regulation: From Research to Release.* Based on hearings conducted between December 1985 and June 1986 by the subcommittee on investigations and oversight, the report focuses on weaknesses in federal regulation of biotechnology.

The report cites an urgent need to clearly define what constitutes containment of a genetically altered organism and deliberate release into the environment. NIH's current biotechnology rules, the committee says, are inadequate to address the needs of agriculture. Regulatory uncertainties already are producing problems, the report says. The committee points to the pseudorabies ex-

periment conducted by Saul Kit of the Baylor College of Medicine and the ice-minus test done by Advanced Genetic Sciences (*Science*, 20 June, p. 1495) as examples. It recommends that the Biotechnology Science Coordinating Committee, a policy setting forum for federal agencies, attempt to resolve these issues within 6 months.

The science committee recommendations call for the General Accounting Office to evaluate whether institutional biosafety committees at universities and other institutions are capable of monitoring research activities that may entail environmental releases of altered organisms. The report also calls on the BSCC to identify gaps in the knowledge base on the effects of releasing biotechnology products into the environment. Federal agencies also are urged to cooperate with industry and universities to develop risk assessment techniques for biotechnology experiments.

The Association of Biotechnology Companies (ABC) and the Industrial Biotechnology Association (IBA) got wind of a portion of the report's contents prior to the committee's 7 October meeting. They feared the report would help social activist Jeremy Rifkin in his legal challenge of biotechnology guidelines published by the Office of Science and Technology Policy in June. ABC and IBA subsequently asked science committee members to hold up approval of the report.

Committee Chairman Don Fuqua (D–FL) on 7 October postponed action after Representative Ron Packard (R–CA) warned that the Republican minority would vote against it. "The tone of the report is not positive," said Packard. Usually, the science committee's reports are passed with unanimous approval. After the inclusion of additional laudatory language about the importance of the domestic biotechnology industry and the threat that excessive regulation poses to American competitiveness overseas, the report won unanimous approval on 15 October. 

MARK CRAWFORD

## **Comings and Goings**

Lewis M. Branscomb, former IBM chief scientist and vice president and National Science Board chairman, has moved to Harvard as professor of public policy and director of the Kennedy School of Government's science, technology, and public policy program. In the director's post, he succeeds Harvey Brooks, who as an emeritus professor will continue to be active in the program.

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