Congress Passes Reforms in Pesticide Law

The Senate this week passed major reforms to the nation's pesticide law that would accelerate the safety review of old pesticides and stop payment of federal money to makers of banned pesticides.

The bill, which had already won House approval, now goes to President Reagan for signature, whose approval is expected.

Proposals to change the pesticide law, known by its acronym FIFRA, have been mired in political controversy for several years. This time around, Congress settled on a stripped down version of earlier proposals that was eventually dubbed "FIFRA-lite."

The bill would speed up the evaluation of about 600 active ingredients in pesticides that have been marketed for years, but never have been rigorously tested for their impact on health or the environment. The review program has been limping along at the EPA, in part because of lack of funding.

The bill would require the agency to finish the safety evaluations in 9 years. (There is no deadline under current law.) It would generate more money for the program by imposing an annual fee on manufacturers for registering a pesticide product. Since there are about 50,000 pesticide products on the market and manufacturers would pay $425 annually for registering each one, the fees would raise about $180 million during the 9-year program.

The legislation also would halt indemnification to manufacturers of pesticides canceled by EPA, relieving the agency of a costly rule. Under current law, when EPA suspends or cancels a pesticide, the agency, out of its own budget, is required to compensate a maker of the pesticide for unused stock and assume responsibility for the stock's disposal. To store and dispose of the four pesticides that qualify for indemnification—EDB, dinoseb, 2,4,5-T, and Silvex—could cost EPA up to $200 million, agency officials have estimated. The EPA pesticide program's annual budget is about $60 million.

Critics say the indemnification rule has discouraged the agency from banning pesticides knowing that it would have to compensate manufacturers and pay out a lot of money itself to store and get rid of the chemicals.

The new legislation virtually stops the flow of indemnification money from the federal government to the chemical companies. The only group that would be compensated are mainly farmers who have unused inventory of the banned pesticide. It would take an act of Congress to reimburse distributors or manufacturers, which is likely to be rarely. The money would now come from a special Treasury Department fund, not EPA.

The new bill also shifts the responsibility for storage and disposal of canceled pesticides from EPA to the registrant. The agency, however, would have the authority to oversee the disposal methods.

A host of other major proposed changes did not survive the legislative process, including language that would have toughened ground-water regulations; extended the patent term for pesticides to make up for the time manufacturers lose going through EPA's regulatory safety review to register products; and protected farmers from liability for environmental damage from pesticides that were applied according to the manufacturers' labeling requirements.

Janet Hathaway, an attorney at the Natural Resources Defense Council in Washington, D.C., said that the passage of the bill represented "a vital first step towards a rational pesticide program."

■ MARJORIE SUN

Trivelpiece to Leave AAAS

AAAS executive officer Alvin W. Trivelpiece announced on 30 September that he has accepted an offer to head the Oak Ridge National Laboratory and become a vice president of Martin Marietta Energy Systems, Inc., which manages the lab under contract to the Department of Energy (DOE). He will assume his new post on 1 January. Trivelpiece, an electrical engineer, served as director of DOE's office of energy research from 1981 until April 1987 when he came to AAAS. His selection as director of Oak Ridge marks the conclusion of an 8-month search. Martin Marietta president Clyde C. Hopkins said in a statement that Trivelpiece's "strong scientific and engineering credentials will ensure commitment to high standards within the laboratory, and his personal character and leadership will provide new direction for Oak Ridge."

The AAAS has established a search committee to select a new executive officer. It is chaired by AAAS board president Walter E. Massey, vice president for research and for Argonne National Laboratory, the University of Chicago. Philip H. Abelson, science adviser to AAAS and former editor of *Science*, has been named acting executive officer.

■ BARBARA J. CULLITON

Breuning Pleads Guilty

Psychologist Stephen E. Breuning pleaded guilty in federal district court in Baltimore on 19 September to two counts of submitting falsified research results in applying for more than $200,000 in grants he received from the National Institute of Mental Health (NIMH).

In return, prosecutor E. Thomas Roberts, agreed to drop a third charge that Breuning tried to obstruct an NIMH investigation into the validity of his research.

Breuning, 36, became prominent in the mid-1980s with his findings that the stimulant drugs Ritalin and Dexedrine can be more effective in controlling hyperactive behavior in retarded children than the tranquilizers then in wide use. His NIMH-funded work widely influenced the field, and several states modified their regulations on treatment of these children to be consistent with Breuning's work.

Breuning, who will be sentenced in November, faces up to 10 years in prison and $20,000 in fines for falsifying those findings. Court papers show that few children supposedly treated actually received either drug, that the research was never done as described in the grant applications, and that the results he claimed had not actually been obtained.

In sentencing, U.S. District Judge Frank A. Kaufman may also bar Breuning from receiving federal research funds for 10 years and require him to pay the University of Pittsburgh $20,000 for each of the 4 years he worked and supposedly conducted the studies there.

The university has already reimbursed NIMH for the costs of lab equipment and salaries for Breuning's research assistants under the NIMH grant, a total of some $163,000.

The unraveling of Breuning's career began in December 1983, when Robert L. Sprague, a researcher at the University of Illinois, Urbana-Champaign, questioned Breuning's findings on tardive dyskinesia in patients at the Coldwater Regional Center in Michigan. Sprague had taken Breuning

on as an investigator in his NIMH-funded study of neuroleptic use with the retarded (*Science*, 29 May, 1987, p. 1057).

Both Ritalin and Dexedrine remain in wide use for clinically diagnosed hyperactive children and, when properly used, the drugs' safety does not seem to be an issue, according to Judith Rapoport, chief of the Child Psychiatry Branch at the National Institute of Mental Health. But the collapse of Breuning's findings does create a "crying need" for more studies to determine the best drugs and dosages for use in mentally retarded hyperactive children, she said.

■ GREGORY BYRNE

Cosmos 1900 Fails Safe

Cosmos 1900, a nuclear-powered Soviet reconnaissance satellite, may have suffered a fortunate malfunction last week. Shortly before the satellite entered the Earth's atmosphere, the reactor separated from the rest of the spacecraft and it was boosted into a high orbit, where it will remain for several centuries. Experts in the West believe that the separation was triggered automatically in response to the failure of one of the satellite's systems.

Normally, ground controllers send a radio signal to trigger the separation and boost mechanisms, but radio contact with Cosmos 1900 was lost before the command was given. Consequently, the satellite has been slowly heading toward reentry complete with its nuclear reactor. This had raised some concern because a previous satellite, Cosmos 954, scattered radioactive debris in northern Canada when it reentered the atmosphere a decade ago.

Last month, American scientists visiting Moscow were told that Cosmos 1900 was equipped with safety systems that would automatically trigger separation of the reactor and boost it into a high orbit if the spacecraft began to wobble, or the reactor lost pressure, or electrical power were disrupted. At that point, however, the spacecraft was working perfectly (*Science*, 23 September, p. 1593). If the spacecraft were to reenter intact, an additional safety mechanism, triggered by heat of friction, should eject the core into the upper atmosphere to assist burnup.

Daniel Hirsch, of the University of California at Santa Cruz, who was one of the scientists briefed by Soviet officials, speculates that the spacecraft may either have run out of attitude control fuel or begun to wobble as it encountered the outer fringes of the atmosphere. ■ COLIN NORMAN

Kingsbury Resigns From NSF

Amid ongoing Justice Department probes of allegations that he worked for a biotechnology company while serving in public office, David T. Kingsbury, assistant director for biological, behavioral, and social sciences at the National Science Foundation (NSF), has resigned. Bloch received the 23 September resignation after Justice sent the agency a letter regarding Kingsbury's financial dealings.

Almost a year ago, Bloch called a press conference to say that he had turned the review of possible financial disclosure and conflict-of-interest infractions involving Kingsbury over to the Justice Department (*Science*, 4 November 1987, p. 742). Relying on an agency report on Kingsbury's links to subsidiaries of a London-based biotechnology company, Porton International PLC, Bloch said then "that no immediate administrative action would be appropriate."

Investigations of Kingsbury, who joined NSF as a political appointee in June 1984, were first initiated at the request of the House Science, Space, and Technology Committee in April 1987. NSF officials have declined to discuss what the civil division of Justice told Bloch in its letter.

Kingsbury, who is taking a job at George Washington University (GWU), also served as chairman of the White House Biotechnology Science Coordinating Committee (BSCC) until September 1987. In that post he had a central role in shaping broad federal guidelines governing the conduct of recombinant DNA research and the commercialization of biotechnology products. No evidence that has surfaced to date, however, indicates that decisions he made at the BSCC and NSF directly benefited Porton.

Instead, the investigations carried out by Justice's civil and criminal divisions appear to be focused chiefly on Kingsbury's alleged work with Porton's subsidiary, I.G.B. Products, Ltd.. A basic question is whether he violated standards of conduct for federal employees, which require that they avoid business and financial dealings that damage public confidence in the government.

A grand jury also has been examining these issues since June and has been reviewing Porton's corporate records, including:

■ A consulting agreement between I.G.B. Products, Ltd., and Kingsbury, which was dated 24 July 1985 and was to cover a 3-year term ending 31 May 1988. A copy of the agreement obtained by *Science* shows that it provided for Kingsbury to be paid $22,000 a year in exchange for working a minimum of 35 hours a month. Actual payment for these services was not to begin until 1 June 1987, the time at which Kingsbury had originally planned to have returned to the company. The agreement was later modified to cut Kingsbury's work load to a minimum of 15 hours a month and to reduce the compensation to $5000 per annum. Kingsbury claims the agreement was never in force.

■ A payment of $9201.67 that I.G.B. Products, Ltd., made to Kingsbury on 13 March 1987. Kingsbury told *Science* that the check was a refund for costs incurred for analyses of heart tissue samples performed by a student at George Washington University. Zsolt P. Harsanyi, one of Porton's chief executive officers, however, contends the payment was for consulting services. Kingsbury returned the payment to I.G.B. in the form of a personal check on 22 June 1987—2 months after the House science committee requested an investigation—saying I.G.B. should have sent the money to GWU.

A year ago, on the same day that Bloch reported that he had turned the matter over to the Justice Department, Kingsbury issued a press release stating that he had suspended his relationship with Porton prior to joining NSF. He also said he had not "accepted compensation in any form for consulting services or other services from any company." Since then, Kingsbury has acknowledged serving on I.G.B.'s board of directors.

Documents obtained by *Science* also indicate that Kingsbury's involvement with I.G.B. during his first few years at NSF was substantial. As a director of I.G.B., Kingsbury had authority to approve company expenditures while he was at NSF. This is reflected in company documents enabling him to cosign large checks written on I.G.B. accounts at the Bank of America or the Bank of Woodland in California. Kingsbury told *Science* that the company had failed to remove his signature card from the accounts when he joined NSF, but documents show that he updated his signing authority at the two banks after he began work at NSF. In fact, he cosigned I.G.B.'s 1987 payment of $9201.67, before endorsing it on the back.

The Kingsbury controversy is expected to result in NSF setting stricter reviews for employees with respect to divulging financial and business relationships that may undermine public confidence in the agency. Congress is also requiring NSF to set up an office of inspector general to act as a watchdog. ■ MARK CRAWFORD