

November 1978). Reacting to vigorous chemical industry opposition, the agency's rules are now considerably more flexible, with more issues—such as specific work practices—set aside for hearings on individual chemicals.

OSHA officials find room inside this flexibility to be at least partly accommodating to the complaints of academic scientists that the new rules will obstruct their work by imposing needless costs and bureaucratic procedures. As expected (*Science*, 5 January 1979), OSHA rebuffed the researchers' pleas for a blanket exemption from the rules, and went so far as to claim that very few of the scientists' claims "were supported by any specific actual documentation or proof." Still, the agency says it "is sympathetic to the special circumstances of research laboratories" and will consider partial modifications or exemptions for laboratories during the standard setting process for each regulated chemical. The

agency also seems to have patched up its jurisdictional dispute with the National Institutes of Health (NIH), and promises to consult the voluntary guidelines developed recently by NIH for laboratory use. No mention is made in the OSHA policy of the forthcoming study of laboratory safety by the National Academy of Sciences.

The OSHA policy has already drawn lawsuits from a labor union and the chemical industry, which will probably delay its effective date of 22 April. The AFL-CIO is seeking reinstatement of the provisions in OSHA's original proposal that automatically triggered regulatory action once a potential carcinogen has been classified as such. The union is concerned that in the absence of such a prod the agency will find an excuse to delay the setting of standards, much as it does now in the union's eyes.

The American Industrial Health Council, a corporate consortium formed spe-

cifically to fight the OSHA policy, is suing on behalf of the chemical industry. The group protests OSHA's refusal to permit nongovernmental scientists on a standard-setting advisory panel appointed at the discretion of the administrator. It also wants the agency to place greater faith in epidemiological studies that produce negative results. OSHA maintains that such studies are so insensitive that carcinogens are easily missed, and therefore, that few studies would qualify as authoritatively negative.

The biggest uncertainty of all this, in addition to the outcome of these lawsuits, is how much time and effort OSHA has saved itself by adopting the uniform rules. In adding to the rules' flexibility, the agency has reduced its arbitrariness, but also compromised its efficiency. The adoption of this policy is really only the beginning, and nearly everything depends on the follow-through.

—R. JEFFREY SMITH

Ski Trips Cost Researcher His Job

Criminal conviction has also led to an attack on his research into the health effects of toxic chemicals

No one has to tell James R. Allen that toying with travel vouchers does not pay.

What started as a \$900 dip into his government grant to pay for a couple of ski trips has ended in a criminal conviction, 6 months probation, a fine of \$4000, resignation from the University of Wisconsin-Madison this coming June, and an attempt to discredit a fair portion of his life's research.

"I have shamed my family, my university, and my state," he told a U.S. district court judge before he was sentenced on 27 November. "I am seeing some of the things I most cherish gradually disappear before my eyes."

Allen, 52, a pathologist at the UW Medical School, is internationally known for his studies on the health effects of TCDD (2,3,7,8-tetrachlorodibenzo-*p*-dioxin). This highly toxic chemical is a contaminant of the Agent Orange defoliant used in Vietnam, of the chemical cloud that descended on Seveso, Italy, and of the common herbicides 2,4,5-T and silvex.

What makes his recent conviction es-

pecially unfortunate in the eyes of many is the fact that the Environmental Protection Agency (EPA) is soon to hold cancellation hearings on the controversial herbicides, and Allen is a key EPA witness. Fighting the proposed ban is Dow Chemical, one of the major producers of 2,4,5-T and of the chemical components of silvex. Dow is now working overtime to discredit Allen's TCDD research, lawyers for Dow recently telling the EPA administrative judge that Allen's "overall credibility and integrity is suspect in light of his recent criminal conviction."

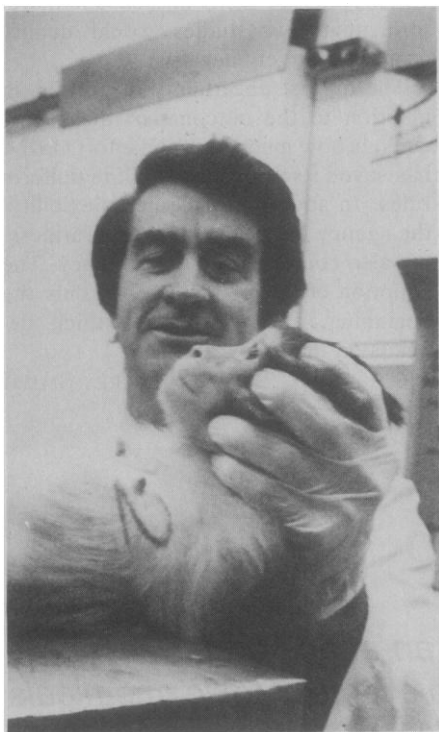
The fact that the conviction and EPA hearing fall so close together has led some zealous environmentalists to conclude that the persons who originally blew the whistle on Allen were in cahoots with the pesticide industry. The villains in this scenario include an assistant in Allen's laboratory and Senator William Proxmire (D-Wis.), who has received two dozen bitter letters and phone calls blaming him for Allen's misfortunes. These allegations seem to be based more on the need to find a scape-

goat in what is clearly an unfortunate situation than on the facts. Allen himself denies any knowledge of mudslinging by Dow, and the particulars of the case make collusion by industry unlikely.

The story began to unfold in the fall of 1978, when a woman who worked as Allen's assistant in his 30-person laboratory wrote a letter to the UW personnel office charging that he had repeatedly violated federal grant regulations. A UW committee investigated the charges, decided they had validity, and passed the complaint to UW Medical School dean Arnold Brown. In a 2 November 1978 letter, Brown told the committee that Allen had denied most of the charges when he asked Allen about them, and that the other charges seemed to stem from a misunderstanding of the federal guidelines. "While I am fully satisfied by the explanation offered by Dr. Allen," he wrote, "I recognize that you may not be. Should you wish to pursue this matter further, it would be necessary for Dr. Allen, [the former worker], and myself to get together to discuss the problems that she described."

The woman, apparently feeling that such a discussion would be difficult, instead wrote to Proxmire. He passed the complaint along to the Inspector General of the Department of Health, Education, and Welfare. After an initial investigation, his office turned it over to the Department of Justice, setting in motion the process that led to criminal charges.

In October 1979, Allen pleaded guilty



James R. Allen

to stealing \$892 from a National Institute of General Medical Sciences postdoctoral training grant, for which he was the director. As part of a plea agreement, Allen provided a three-page affidavit describing his deeds. In March 1978, he attended a toxicology conference in San Francisco and stopped in Utah to ski and relax. Allen said he had hoped to interview persons at the University of Utah for postdoctoral positions but did not do so. "Nevertheless, in submitting a travel expense report for the entire trip, I included a request for reimbursement for the detour to Park City, falsely stating that the purpose of the trip to Salt Lake City was to interview postdoctoral candidates there."

In March 1978, he attended a conference in New Orleans but flew first to Colorado. He deliberately created the impression that he intended to meet a researcher in Colorado and interview candidates when seeking repayment for the trip.

From 30 May to 2 June 1978, Allen and his son visited Telluride, Colorado,

where his wife owns property. Allen never visited Colorado State University in Fort Collins, but created the impression he did by submitting airline ticket vouchers. For his son's expenses, Allen used the name of a postdoctoral researcher on an expense report.

It is feared among some environmentalists that the conviction could affect the outcome of the EPA cancellation hearings. Last March, EPA temporarily halted most uses of 2,4,5-T and silvex when an epidemiological study linked human exposure to TCDD with increased risk of miscarriages (*Science*, 16 March 1979). The cancellation hearings, slated to start 13 February, would extend the scope of that ban and make it permanent. Of the 140 witness expected to testify, 60 are being brought by EPA, 50 by Dow. Allen is one of two researchers slated to testify for EPA on the increased risk of miscarriages in monkeys given TCDD. "The work that I have done is rather critical," Allen told *Science*. "It is a rather difficult time right now, but I am going to testify, much to my dismay."

Most troublesome is that Dow currently wants all of Allen's underlying data. "There are compelling reasons to require full production and scrutiny of Dr. Allen's work," Dow lawyers told the judge. "EPA's own laboratory auditors have criticized severely the laboratory practices employed by Dr. Allen, and toxic PCB's have been found in tissue from test animals in Dr. Allen's 500 ppt [part per trillion] monkey study, raising serious questions about the reliability of any of Dr. Allen's work. In addition, Dr. Allen's general credibility is impugned by his recent admission of guilt involving the theft of government funds."

Such a demand for underlying data is perfectly legal and even expected, although some lawyers say that Dow is being unduly rough about the exercise. "They've asked for the kitchen sink," says William Butler of the Environmental Defense Fund. "And if the truth be told, Allen has not been forthcoming with the data, not even as much as any of the other scientists. He is understandably preoccupied, and his authority with his own laboratory is somewhat blurred at the moment." A fight is now developing over how much data the EPA administrative law judge can make Allen produce. Dow lawyers want a document subpoena filed in Wisconsin. EPA lawyers question the legality of a subpoena issued by an administrative law judge and whether it can be filed for what they claim are incomplete studies. Dow lawyers say the material, even if incomplete, has already been published in one form

or another and cited in the scientific literature, and is therefore relevant to the case. "I'm sure that Dow is gloating about all this," says Butler, "and that EPA is horrified."

Although Dow seems only to be applying pressure of a legal sort, a flurry of letters from environmental groups suggest that Dow bought off the whistleblowers. One letter to Vice President Mondale says an investigation should be launched into who contributed to Proxmire's last reelection fund. Proxmire's staff is a bit amused by this. They claim that in 1976 Proxmire spent only \$173 on his campaign—and that was out of his own pocket. Said one staffer: "This is a classic case of people so paranoid that they can't face the truth."

One letter to Proxmire, from the Washington office of Friends of the Earth, asks him to write a letter in support of Allen's research to UW Chancellor Irving Shain, who was to decide if Allen would be dismissed from the university or otherwise punished. "Now that the action of your staff has put Dr. Allen into this position," the letter stated, "we hope you can help him retain his tenure."

In light of Allen's announcement on 18 January that he will resign as of 30 June, tenure is no longer an issue. Still unresolved is where Allen will go and what he will do when he gets there. Some observers believe the conviction has dealt a severe blow to his chances for obtaining other grants. Allen himself is optimistic. He says that the National Institute of Environmental Health Sciences assured him that "even though I have encountered some difficulties, my successful grants will be awarded, and the things that occurred recently will not influence my ability to get grants in the future."

Also unresolved is what impact his work in the field of environmental health will have in the future. In the past, Allen's research has been cited not only by EPA but by Vietnam veterans seeking compensation for alleged health problems they suffered as a result of exposure to Agent Orange.

As made clear by the Dow lawyers, however, the credibility of his work is liable to come under fire and will probably continue to be in dispute for quite some time. For the purpose of attacking the credibility of a witness, according to the *Federal Rules of Evidence*, a lawyer is free to cite a conviction involving dishonesty or false statement, and the only time such evidence is not admissible is if a period of more than 10 years has elapsed since the date of conviction.

—WILLIAM J. BROAD

SCIENCE, VOL. 197