

ACTING ASSISTANT ADMINISTRATOR, taking over for the departed David Dominick at EPA, at least on a temporary basis, is Charles Elkins, Jr. Dominick put in a few good words for Elkins during a departure ceremony Oct. 12.

NEW CHAIRMAN of the Council on Environmental Quality, taking over for Russell Train, is former Delaware Governor Russell Peterson, who had been mentioned for EPA Administrator but was nixed by big contributors to Nixon's reelection.

TOXIC SUBSTANCES legislation still is stuck in House-Senate compromise conference. Environmentalists' campaign for the Senate version is beginning to show up in daily news editorials regretting the delay.

NEW AIDE to EPA Administrator Train is James Oberwetter, who moved up from the Office of Hazardous Materials Control. Taking his slot in OHMC was Katherine Schirmer, up from the Office of Toxic Substances. The spot is a key one for industry, public liaison.

FIFCA vs. FIFRA: The correct name of last year's Pesticide Control Act, according to an all-EPA memo from Henry Korp, is "Federal Insecticide, Fungicide and Rodenticide Act, as Amended," or at least it will be when all effective dates have passed.

IMPORT DETENTION by EPA on Oct. 9 detained 1000 kilograms of Norflurazon Technical shipped by Sandoz, Ltd. of Switzerland to Homestead, Fla. The agency said the product, valued at \$8,500, was not registered.

PARTICIPATION in the interagency task force on asbestos was sought by the National Bureau of Standards, in a letter to the Food and Drug Administration. NBS pointed to its available laboratories "whose activities can well be addressed to this problem." Meanwhile, both R. T. Vanderbilt and the International Talc Co. have objected to the recent FDA Federal Register publication on asbestos (See Oct. 3, Page 6), complaining that it failed to state all different points of view. Vanderbilt said it may submit a petition for publication, like that submitted by the Center for Science in the Public Interest and the Environmental Defense Fund, "if necessary" to have all interested parties "realize that there are many points of view to be considered."

POLYCHLORINATED BIPHENYL residues in contaminated silos will be studied by scientists at the Ohio Agricultural Research and Development Center, Wooster, under a \$12,000 grant from the Agricultural Research Service. PCB residues in milk, as a result of their retention in a silo sealant, represent a potential threat to the health of consumers and to the economic production of both meat and milk, ARS said. The Ohio scientists will study effectiveness and durability of various coating materials used in silos to prevent PCB contamination.

GREEN PEACH APHID, the principal vector of leaf roll disease of potatoes, will be studied by scientists at the Life Sciences and Agricultural Experiment Station at the University of Idaho, Idaho, under a \$6,000 grant from the Agricultural Research Service. The Maine scientists will study non-chemical ways to control the pest such as using a fungus which kills the aphid.

DAVID PIMENTEL, A Cornell University Professor of Entomology, Ecology and Genetics and the first EPA witness at the aldrin/dieldrin hearings (See story, Page 10) chairman of the Environmental Impact of Herbicides.

October 17, 1973

Korp said in summary, "I would say generally that in some cases we would expect more opportunities for sales since the new law will allow the use of certain pesticides which in the past have been or would be denied registration on the basis of unacceptable hazard. On the other side, we have not made it a secret that we are dedicating money for research in Integrated Pest Management techniques which may tend to reduce the amount of chemicals applied in given situations."

CIBA-GEIGY CHARGES PATENT VIOLATION IN SUIT AGAINST FARMLAND INDUSTRIES

Ciba-Geigy Corporation of Greensboro, N.C. filed charges Oct. 9 in the U.S. District Court of Kansas against Farmland Industries, Kansas, City, Mo., charging violation of the patent on atrazine, a leading corn herbicide, manufactured by Ciba-Geigy under the trade name AATrex.

A Ciba-Geigy spokesman said that the move culminated months of negotiations which produced no agreement with Farmland. He said the suit seeks to hold Farmland liable for damages done to Ciba-Geigy as a result of Farmland's sale of an atrazine product.

11- He quoted from a Farmland newsletter which said that the first supply of the technical product used to make what Farmland is selling as atrazine came from a Milan, Italy based firm, Oxon Italia.

According to the Farmland publication, the product was then sold to a French firm where it was bought by Farmland and shipped to New Orleans and then brought by rail to Kansas City.

Farmland will have 30 days to reply to Ciba-Geigy's accusations that they are selling the atrazine products illegally.

Ciba-Geigy said that the patent for atrazine doesn't expire until 1976 in the U.S. but has long since expired in most other countries.

OTHER STUDIES CHALLENGED: HMAC FEARS OF AQUATIC-CHEMICAL RESEARCH

While hearing of Environmental Protection Agency studies of specific chemicals in estuarine and freshwater environments, the agency's Hazardous Materials Advisory Committee (HMAC) was told this week that virtually all measurements of DDT in the environment are suspect because of phthalate plasticisers and that degradation products of parathion appear to be more stable than DDT.

12- In the wide-ranging meeting Oct. 15 and 16 in Washington, Dr. Donald Crosby of the University of California at Davis questioned the tenets of traditional chemical analysis at lower and lower levels of substances because of the difficulty of tracing similar or degradation products at these small amounts.

Crosby averred that under environmental conditions, DDT is "remarkably unstable" and contrasted it with parathion, which he said is "much more stable than we ever thought."

HMAC Chairman Emil Mrak remarked that policy judgments have been made by "those who were unaware" of the "interference" phenomena described by Crosby. The California researcher had said that phthalate plasticisers appear through virtually all of the "clean-up" procedures used in chemical analysis of DDT residues, saying, "At this point, I would suspect any DDT analysis because these phthalates are so common and they do follow right through the clean-up procedures for DDT."

2,4-D Said to Break Down Into Variety of Chemicals

Interference also has been a factor in chemical analysis of arsenic residues, he said, along with mercury and phenoxy herbicides such as 2,4-D and 2,4,5-T.

He said studies have demonstrated that plants begin working immediately on 2,4-D, converting it to degradation chemicals with properties "quite different" from the herbicide. Two of these remain in the plant, he said, and are not soluble there. However, he continued, these same chemicals are converted in the mammalian stomach to 2,4-D again.

The physical, chemical and toxic properties of arsenic compounds "are changed remarkably" by microorganisms in the soil, Crosby said, continuing, "So now we have to reassess what the fate of the arsenicals is."

With mercury, very little information is available, he said, as to how much is converted into the "very stable" compounds formed by the combination of mercury and sulphur compounds.

Noting that much of his presentation would be available in the just-published Annual Review of Plant Physiology, Crosby urged:

"What we need is verification for precise chemicals. More sensitivity (of chemical analysis methods) is not what we need; more specificity is needed."

In questioning, Crosby said many analyses done by agencies for regulatory purposes "are in the ball park." He continued, "But, our regulatory system is somehow going to have to be flexible enough to recognize change."

In a debate on greater sensitivity of methods, Crosby said: "There doesn't seem to be any problem in itself with microanalysis. The trouble comes with interference at these levels."

A member of HMAC, William Darby of the Nutrition Foundation, insisted:

"The real question is premature or unwise interpretation of data so gathered. I think (the push for 'picogram measurements') comes in part from the scientific community and in part from regulatory agencies who have to respond to public pressures."

Dr. Lloyd Tepper, Food and Drug Administration Associate Commissioner for Science, rejoined, "The real issue is the value judgment as to how much risk is acceptable." He insisted: "Activist groups are not 'wrong.' They simply represent one end of the spectrum."

Dr. William Upholt, senior science advisor to EPA's Assistant Administrator for Hazardous Materials Control, said quantity of a chemical is not the issue, but that health effects are the important factors.

He also noted, responding to a comment by HMAC Chairman Mrak, that a variety of chemicals other than parathion had also been used as replacements for DDT, including other organophosphate compounds, endrin and carbamates.

95% of Estuarine Studies Said to be of Pesticides

Dr. Thomas Duke of EPA's Gulf Breeze Environmental Research Laboratories in Florida told HMAC that most of the research at the laboratories this year is on parathion, methoxychlor, malathion, mirex and polychlorinated biphenyls.

About 95% of the labs' research in estuarine environments has been with pesticides, he said. Other chemicals on which work has been done included picloram, carbamates and hexachlorobenzene, he said. Among effects that have been observed at the laboratories, he noted, is that fish will avoid DDT, but not 2,4,-D, that chemicals may alter the "salinity preference" of some species and that a "delayed effect" had been noted for mirex.

"Quick-study" Fish Species Being Used by Duluth Lab

Another speaker, Dr. Donald Mount, told HMAC of studies on freshwater aquatic species at the National Water Quality Laboratory, Duluth, Minn., noting a wide range of sensitivity among these species.

Another variable, he noted, is that exposure in the environment may be continuous or sporadic. Also, he said, breakdown products are "very important," but little data exists on these. "Again," he continued, "combined effects are important, but we have too little information."

The lab has found, he said, a fish species with a life cycle of six weeks and has offered it to industry for their use. He identified the fish as "flag fish," which occur in the Southeastern U.S.

Mount said the water quality lab is conducting studies on malathion, DDT, Capton and Diazinon. In addition, he said, the lab has let contracts for the study of atrazine, lindane, parathion, chlordane, toxaphene, heptachlor, endosulfan, phthalates, chemicals such as propachlor and several solvents, such as acetone, dimethylformamide and triethylene glycol.

Mount said the lab has discovered a "coughing reflex" in many species of fish which is caused by, among other things, exposure to chemicals. This reflex can be monitored and compared, he said.

The lab also is developing a concept, he continued, whereby aquatic species such as oysters or mussels might be used to predict unknown chemical dangers. The species would be used as a "concentrator" and would be fed to specific mammals to comprise 100% of the mammal's diet."

HMCA HEARS CASE FOR DDT USE AGAINST TUSsock Moth

The Pacific Northwest will have to live with the consequences of not using DDT against tussock moth for 10-30 years, the Environmental Protection Agency's Hazardous Materials Advisory Committee (HMCA) was told by Errett Deck, Undersecretary of the Washington Department of Agriculture and a member of the committee.

Enumerating a series of factors which he said EPA should have known in advance of the Administrator's letter turning down the emergency use of DDT (See April 25, Page 14), Deck elicited charges from HMCA Chairman Emil Mrak that EPA should have listened to "more than one scientist." Deck seconded that the knowledge of local experts in the Northwest should not have been ignored. He called for a new decision-making process in the agency in which regional or local experts' voices would count for something.

"I am speaking now more for the benefit of the agency than the trees," Deck said, although he noted that the U.S. Forest Service is expected to make a decision in December as to whether DDT might be needed against tussock moth during 1974 (See Oct. 3, Page 3).

Among the things that EPA should have known in 1973, according to Deck, was that even though a natural polyhedral virus may have worked in some areas, the outbreaks were in widely scattered locations and some of these were not in the third year of the outbreak cycle.

Although he noted that more than 600,000 acres of trees have been defoliated, he said the amount is not the real issue. He said the risk goes down as treatment is necessary for fewer acres.

Among other factors EPA should have known, he continued, were the facts that many of the trees were not salvageable as lumber because they were immature or there were no roads to them; that a substitute chemical, zectran, had shown little success and had even abetted defoliation in at least one instance, and that minimal "topkill" of trees leads to secondary infestation by bark beetle.