Monsanto

FROM (NAME & LOCATION) D. D. Mickelson/WGK

DATE November 24, 1971

SUBJECT PCB's IN AC1

REFERENCE

TO : H. J. Horner

cc: E. R. Billen
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F.Y.I.
12/2/71

Attached is a recent article from the newspaper in which it states that PCB's have been found in machine dishwashing compounds (MDWC) made by Economics Labs. AC1 and CDB (equivalent product made by FMC) are the cyanurates used by Econo-Labs as the chlorine disinfectant in their MDWC. FMC supplies all the Econo-Labs production facilities in the U.S., except for the Dallas facility. We have supplied the latter, which ships products basically into southwestern markets.

There is a possibility that the PCB's may be entering the MDWC through the AC1 or CDB in the formulations. Since this was detected in Wisconsin, I feel that CDB (and not AC1) was the dry chlorine agent present. We have indications that FMC has used and may still be using PCB's as a dust inhibitor in the manufacture of cyanurates. We do not use them in this manner, since we make a coarser, less dusty product.

PCB's, however, are used in cyanurate manufacture, since they will not lower the fusion temperature on mixing with the cyanurates. Possible other PCB contamination sources in our process and FMC's could be the centrifuge hydraulic system and compactor hydraulic system. These sources would only occur infrequently as a result of breakdowns and would not be a continuous PCB contributor. Hence, I feel if the PCB's are coming in through the cyanurates it is possibly through the use of them as dust-inhibitors on a continuous basis.

Would you undertake to determine the PCB level in both AC1 and CDB. By copy of this memo, I am asking Fred Regula to supply whatever samples you do not have. I would suggest several random samples of:

AC1-85 powder produced in 1971
AC1-66 powder produced in 1971
AC1-59 powder produced in October, 1971,

and AC1-60 granular. (This is purchased directly from FMC as their CDB-63 with our label in place of theirs).

D. D. Mickelson

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my
Attachment

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PCBs In El

By E. F. PORTER JR.
Of the Post-Dispatch Staff

PCB, a widely used family of chemicals related to DDT and other so-called hard pesticides, have been discovered in electric-dishwashing detergents, two University of Wisconsin researchers reported last week.

The discovery was made by G. Fred Lee and Gilman Veith of the university's Water Chemistry Laboratory in Madison. The substance has been found in Electrosol and Finish, two dishwashing compounds produced by Economics Laboratory, St. Paul, Minn.

The finding was made in trying to trace the origin of PCB and other man-made chemicals in Lake Michigan. Although the concentrations in the lake are extremely small, they have been found to build up in the body fat of trout, salmon and other fish so that the concentration in the fish is sometimes 100,000 times than that in the surrounding water.

Michigan authorities recently banned the taking of Coho salmon. The fish were found to contain 30 parts of PCB for every million parts of body tissue, six times the limit imposed by the Federal Food and Drug Administration.

Cohos were introduced to Lake Michigan about five years ago in an effort to revive its ailing fisheries.

Lee and Veith emphasized that the PCB levels in the detergents were too low to pose any direct peril to humans.

"PCB IS a serious problem in the lake because it is harmful to fish and certainly to fish-eating birds," Veith said. "All you have to do is look and see what's happened to the eagles to see that."

Much of the killing of predatory birds formerly attributed to DDT has been shifted to PCB, he said.

PCB is a colorless fluid with an almost endless variety of uses, including plastic and paper-manufacturing. It is used as an additive to pesticides to make them more persistent and as an insulator for electrical equipment. It is manufactured exclusively in this country by the Monsanto Co., mostly at the company's Krummrich plant on the East Side.

About two years ago, Monsanto announced that it would market the product only for closed systems—that is, for uses where it would not escape to the environment.

Last month, however, after federal investigators found that PCB from cardboard containers had been absorbed in breakfast cereal, Monsanto acknowledged that it had continued to ship the substance up until April 1971.

The Wisconsin reserach team stressed that not all the PCB in Lake Michigan could have originated with the two detergents. PCB has been found in sewage outfalls of small towns bordering the lake. These towns probably have few electric dishwashing machines, Lee said.

PCB, was first detected in Electrosol and Finish about a year ago, Lee said. The manufacturer was notified and promised to investigate. It was discovered again during a recheck last August, Lee said.

ectric-Dishwashing Detergents

Lee and Veith theorized that the substance was added to the detergents as a dust-inhibitor, but company spokesman denied this.

W. F. Podas, vice president of Economics Lab in charge of research and development, said that the firm purchased several raw chemicals from Monsanto but not PCB.

He said that PCB was not deliberately included in the detergent.

He said that he had asked Monsanto to check to see whether their other chemicals were tainted with PCB.

A Monsanto spokesman said, "We really do not have a lot of information on this incident. We can only make a guess, admittedly a guess. The PCBs probably stem from the packaging material, which in turn, we assume, is being made of recycled paper."

Veith guessed differently.

"There is too much of the stuff in the detergent for it to have rubbed off from the sides of the box," he said.

ST. LOUIS POST-DISPATCH Sun., Oct. 31, 1971 23 A

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