bc: Mr. H. S. Bergen - HBFRG
Mr. E. P. Wheeler - EWHEE
Mr. W. R. Richard - WRICH
Mr. E. V. John

June 13, 1969

Mr. Robert A. Hoving
Booth Newspapers, Inc.
515 National Press Building
Washington, D.C. 20004

Dear Mr. Hoving:

Enclosed is a statement from Monsanto which should help in your consideration of whether there is a story on the alleged effect on the environment of polychlorinated biphenyls (PCB). Since you work for nine newspapers in Michigan, I presume your interest arises from the mention of PCBs at the recent DDT pesticide hearings in Wisconsin.

This matter first arose in the United States when the San Francisco Chronicle ran a story late in February based on the work of a scientist in California. The deadline of that writer did not give us time to submit our side of the story. The enclosed statement contains facts which should have been presented.

It seems PCBs have come "into the picture" as a result of the controversy over DDT -- since PCB and other substances do interfere with exact analysis of DDT residues. The charge by some writers that PCB is a threatening contaminant is out of perspective.

PCB is not a pesticide and is used in highly specialized and restricted ways. We find it difficult to see how that much PCB could be showing up in the environment. It's kinda like saying that "not only does the exhaust of your car contribute to air pollution, but also the hydraulic fluid in your brake system."

-more-

DSW 019476

STLCOPCB4007407

PCB is not highly toxic. It would make a lousy pesticide. One measurement of this is the lethal amount it takes to kill a rat. DDT will do the job with 120 milligrams of chemical per kilogram of the rat's weight. For PCB, it takes 5,000 to 10,000 milligrams per kilogram of weight.

The San Francisco Chronicle story also said that, "No tolerance limits (for PCB) have been set for human food supplies and their cancer-causing properties remain to be determined." This is technically correct, but highly distorted. One could also say it has yet to be determined if PCB might not prevent or fight cancer. In the food area, the fight over DDT revolves around those who say four parts-per-million, etc., of DDT in food is perfectly safe -- and those who disagree. To date nobody has even reported finding PCB in food.

Even the alleged damage to wildlife seems to be in question. At the Wisconsin hearings, the California scientist (a Dr. Risebrough) was quoted as testifying that PCB was not the cause of thin egg shells for birds -- that the amount found was too small and DDT was the cause. I do not know if he was correctly quoted, but am enclosing these newspaper reports.

We do not brush aside these initial reports on PCB. We are investigating the matter on a worldwide basis and, in fact, began work well before Dr. Risebrough's report. But the entire matter has been grossly distorted.

If you have further questions, please feel free to contact us. My phone is (314) 694-2887. Although I will be on vacation through July 4, any inquiry will be handled in my absence.

Sincerely,

Tom C. Ford
Manager
Divisional Public Relations

TCF:mw
Enclosures

DSW 019477

STLCOPCB4007408

bc: NEW YORK - Mr. P. R. Wilkins
Mr. H. S. Bergen - HBERG
Mr. E. P. Wheeler - EWHEE
Mr. W. R. Richard - WRICH
[redacted]

June 13, 1969

Mr. Phillip Yaffee
Wall Street Journal
2999 West 6th Street
Los Angeles, Calif. 90005

Dear Phillip:

Although you decided to put the "PCB contamination" story on the shelf, thought I would go ahead and answer some of the questions Dr. Risebrough raised about our March 3 statement.

First, we know his published technical paper did not say PCB was "killing birds." Our statement referred to the San Francisco Chronicle article which said PCB "threatened the welfare" of birds via harming the eggs, etc.

Our reference to unknown substances in the parts-per-billion range related to the initial DDT work done many years ago. The residues reported by Risebrough and others have been in both parts-per-billion and parts-per-million, so perhaps a general usage of the latter would be more correct.

Dr. Risebrough indicated our sentence that PCB is essentially insoluble in water was misleading. We did not intend such. We know PCB is fat soluble. We did want to point out that its insolubility in water meant it settles to the bottom and is not easily transported or dispersed.

As I mentioned over the phone, PCBs are not used in automobile tires or house paints -- nor are they in household products, epoxy resins or major vinyl plastics, as has been stated in some press reports.

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DSW 019478

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We also stick with the statement that PCBs are not "highly toxic" materials. Of course here we are getting into an area of relativity. PCBs are not classified as "highly toxic" for handling and use. They would make a lousy pesticide. One measurement of this is the lethal amount it takes to kill a rat. DDT will do the job with 120 milligrams of chemical per kilogram of the rat's weight. For PCB, it takes 5,000 to 10,000 milligrams per kilogram of weight.

We are not yet in a position to say whether the work done by several scientists correctly identified the wildlife residues as being PCB. Our own research program will clarify these findings. It also goes much further, as outlined in the slightly revised statement I am enclosing.

In retrospect, Phillip, it seems PCBs have come "into the picture" as a result of the current work on DDT -- since PCB or similar substances do interfere with exact analysis of DDT. The charge by some writers that PCB is a threatening contaminant for mankind is out of perspective.

At a recent DDT hearing in Wisconsin, Dr. Risebrough was quoted as testifying that PCB was not the cause of the thin egg shells for birds -- that the amount of PCB he found was too small and DDT was the cause. I do not know if Risebrough was correctly quoted, but I am enclosing these newspaper articles.

The San Francisco Chronicle story also mentioned that, "No tolerance limits (for PCB) have been set for human food supplies and their cancer-causing properties remain to be determined." This is correct, but distorted. One could also say it has yet to be determined if PCB might not prevent or fight cancer. In the food area, the controversy over DDT revolves around those who say four parts-per-million, etc., in food is perfectly safe -- and those who disagree. To date nobody has even reported finding PCB in food.

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We do not brush aside these initial reports on PCB. We are investigating the matter on a worldwide basis. Please let me know if you ever want to pursue this further.

Sincerely,

Tom C. Ford
Manager
Divisional Public Relations

TCF:mw
Enclosures

DSW 019480

STATEMENT FROM:
MONSANTO COMPANY
ST. LOUIS, MO.

March 3, 1969

Late in February, 1969, a West Coast newspaper carried a major feature about "a menacing new pollutant" found in the San Francisco Bay area. The article was based on marine life research carried out by Dr. Robert Risebrough of the University of California. The article stated that residues of pesticides (DDT and DDE) and polychlorinated biphenyl (PCB) were threatening the welfare of certain birds and posed a long-term threat to humans.

Monsanto manufactures polychlorinated biphenyl and markets it under our Aroclor trade name. (There are other manufacturers in Europe and Japan.) We, therefore, would like to present some additional facts.

The work done by Dr. Risebrough dates back to earlier research by other scientists who, while analyzing pesticide residues in wildlife, soil and water, encountered unknown or "interfering" substances in the parts-per-million range.

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Several years ago, two Swedish scientists at Stockholm University's Institution of Analytical Chemistry, Professor Gunnar Widmark and Soren Jensen, reported they had identified these other substances. They said some of the materials were polychlorinated biphenyl or PCB. Since PCBs are not "broadcast" or spread around the land as are pesticides, the scientists theorized that the source must be the industrial wastes of PCB users.

The conslusions of these scientists are puzzling from several aspects. Polychlorinated biphenyls are stable chemical compounds which are essentially insoluble in water and not easily dispersed. Their use does not make them easily released into the natural environment.

A principal market for PCB is in electrical applications where they are used as insulating fluids for transformers and capacitors. In this use, the chemical is completely sealed in metal containers. Another market is for heat-transfer applications where the PCB fluid functions in a closed system.

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STLCOPCB4007413

PCBs are also used in several applications where the chemical is incorporated into a polymer as an integral part of the solid material. Such polymers are used in highly specialized applications as an adhesive, elastomer or surface coating.

Polychlorinated biphenyls are not sprayed or dusted on crops, woodlands or any other areas, as are pesticides. To our knowledge, they also are not used in tires, house paint, household products, epoxy resins or major vinyl plastics, as has been charged.

It is, therefore, not only puzzling, but extremely difficult to conceive how commercially produced PCB can show up in wildlife in the quantities reported. This raises the question whether the substances identified in the Swedish work, and now in California, are actually PCBs -- or whether they are compounds which, due to the metabolism of other materials in the marine environment, appear to be PCBs.

It has also been implied that polychlorinated biphenyls are "highly toxic" chemicals. This is not true. Just like other industrial chemicals and home products now in widespread use, PCBs are not hazardous when properly handled and used. During more than 30 years of U.S. production and use, cases of any toxic effect have been extremely rare -- and then only where the simple precautions recommended for use were not followed.

DSW 019483

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Monsanto has a research program to identify the compounds reported to be PCB by the Swedish and California scientists. This involves precise analysis of environmental samples of water, air, soil and wildlife, including metabolic studies. Also under way are studies to determine the biological effects of deliberate dosage of PCBs on fish, birds and mammalian animals. Special emphasis is being paid to endocrinological effects, mineral metabolish and reproduction physiology.

Monsanto has always cooperated, on a regular basis, with federal, state and university laboratories in their analysis of chlorinated hydrocarbon residues. We will continue to do so. Additionally, Monsanto will continue to exercise the highest degree of control in its manufacturing, shipping and storing of PCB -- as we do with all products. In the functional fluids market, we have carried out a program for several years for the reclamation of used PCBs to reuse these valuable materials.

The source of the marine life residue identified as PCB is not yet known. It will take extensive research, on a worldwide basis, to confirm or deny these initial scientific conclusions.

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