Monsanto

FROM (NAME & LOCATION) Tom C. Ford - St. Louis

DATE February 28, 1969

2/28/69

CC Mr. W. R. Richard
Mr. E. P. Wheeler

SUBJECT

REFERENCE

Tom Ford

TO : Mr. Howard S. Bergen

Attached ~~att~~ is the approved statement. (per Wheeler, Bill Richard Jim Sprungate & myself)

HSB

Enclosed are two copies each of some suggested correspondence about the supposed contamination of wildlife by polychlorinated biphenyls. This includes a brief memo for possible distribution to salesmen and a longer letter for mailing to customers.

The letter esentially contains comments drafted yesterday by Elmer Wheeler and Bill Richard. Neither man has had a chance to see these drafts and, by carbon, I am asking them to call you immediately if they see the need for any further revision.

I am going to be tied up some of today with a job interview, but would be available to come over before 10 a.m. or after 3:30 p.m.

Tom

Tom C. Ford

TCF:sfh
Enclosures

MONS 097594

Statement from Monsanto Company St. Louis, Mo.

March 3, 1969

MONSANTO COMPANY
PUBLIC RELATIONS

On February 24, the San Francisco Chronicle carried a major feature about "a menancing 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. It stated that residues of polychlorinated biphenyl (PCB) were killing certain ~~marine~~ birds and ~~posed~~ imperiled a long-term threat to humans.

~~This sensational story has~~ caused considerable comment ~~on the West Coast~~ and its claims may be repeated elsewhere. ~~As you know,~~ 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 to analyze the amount of pesticides in wildlife, soil and water. The initial pesticide research was extremely difficult since any search to detect materials in the parts-per-billion range also brings out other "interferring" substances.

Several years ago, two Swedish scientists at Stockholm University's Institution of Analytical Chemistry, Professor Gunnar Widmark and Soren Jensen, reported they had identified the other substances which were appearing during analysis of chlorinated pesticide residues. They said some of the materials were polychlorinated biphenyls or PCB. The amount reported was in the

parts-per-billion range, or less. Since PCB's 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.

Dr. Risebrough's more recent work reports the identification of PCB, along with DDT and DDE pesticides, in the tissues of birds and fish on the West Coast.

The conclusions of these scientists are puzzling from several aspects. Polychlorinated biphenyls are stable chemical compounds which are essentially insoluble in water. 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. (A)

PCB's are also used in several "plastic type" applications. Here the chemical is incorporated into the polymer as an integral part of the solid material. This applies whether the polymer is used as an adhesive, an elastomer or a surface coating.

It has been implied ~~The Swedish and American~~ scientists also ~~imply~~ that polychlorinated biphenyls are "highly toxic" chemicals. This is not true. The toxicity of any material, whether it be chemicals, drugs, natural plants or even foods, is relative. Just like ~~Compared to the thousands of~~ other industrial chemicals and home products now in widespread use, PCB's are not ~~exceptionally~~ hazardous when properly handled and used. ~~toxic unless they are mishandled or misused.~~ During more than 30 years of U.S. production and use, cases of any toxic effect have

have been extremely rare -- and then only where the simple precautions recommended for use were not followed.

To our knowledge, polychlorinated biphenyls are not sprayed or dusted on crops, woodlands or any other areas, as are pesticides. It is, therefore, not only puzzling, but extremely difficult to conceive how commercially produced PCB can show up in ~~wildlife as DDT and other pesticides appear to be.~~ This raises the question whether the substances identified in the Swedish work, and now in California, are actually PCB's -- or whether they are compounds which, due to the metabolism of other materials in the marine environment, appear to be PCB's.

Unfortunately, even though techniques for analyzing tissue samples have become quite precise, the ability to analyze the possible impact of naturally occurring substances in the food cycle of living organisms has not made comparable advances.

Monsanto has a research program to ~~confirm the~~ identify ~~of~~ the compounds reported to be PCB by the Swedish and California scientists. We ~~also~~ cooperate on a regular basis, with federal, state and university laboratories in their analysis of chlorinated hydrocarbon residues.

Additionally, Monsanto will continue to exercise the highest degree of control in its manufacturing, shipping and storage of PCB -- as we do with all products. In the functional fluids

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market, we have carried out a program for several years for the reclamation of used PCB's ~~so as~~ to ~~recover and~~ 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 ~~the~~ this initial scientific conclusions. ~~We will keep you advised of our own research and are available to answer questions as they may arise.~~