STATEMENT FROM:
MONSANTO COMPANY
ST. LOUIS, MO.

Revise Copy to Tucker/Heller

ALB Do not relate Aroclor to PCB
Some Aroclors not PCB

C 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~~ It 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.

D Monsanto manufactures polychlorinated biphenyl and markets it under ~~our~~ the Aroclor trade name. (There are other manufacturers in Europe and Japan.) ~~We, therefore, would like to present some additional facts.~~ It should be noted that not all Aroclor products are polychlorinated biphenyls.

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

-more-

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~~ their source must be ~~the~~ industrial wastes ~~of PCB users~~.

~~In addition to the work of Dr. Risebrough and the Swedish scientists, there have been other~~ more recent studies which have also indicated the presence of PCBs in the environment. Monsanto is concerned over ~~the~~ this situation and is conducting its own research program as well as cooperating fully with ~~those~~ other studies. (See attached statement on Monsanto's current state of residue analysis)

~~The common uses of commercial PCB would not normally lead to its release 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.

-more-

PCBs are also used in plasticizers ~~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 are not used in tires, house paints, household products, or major vinyl plastics, ~~as has been charged~~. Although at one time these were suggested applications, to our knowledge PCBs have not been used in this manner. Therefore, conclusions as to the source of PCB reportedly found in the environment ~~are difficult to make~~ point toward industrial wastes or improper handling or disposal when used in the above applications.

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 40 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.

-more-

Monsanto has research programs under way to identify the compounds, reported to be PCB, and locate their source. The programs involve precise analysis of environmental samples of water and soil. Also under way are studies to determine the biological effects of deliberate dosage of PCBs on fish and mammalian animals. Special emphasis is being paid to endocrinological effects, mineral metabolism and reproduction physiology.

Some preliminary biodegradibility studies are under way. Further studies to clearly demonstrate this phenomonon are contemplated.

Very early results of chronic toxicity studies confirm that PCBs are not highly toxic. In 90-day studies on rats and other normal laboratory species, there have been no adverse effects when feedings of up to 100 parts-per-million were administered.

MONS 058135

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~~ In addition, we will continue to exercise the highest degree of control in ~~the~~ 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~~ has not yet ~~known~~ been positively located. It will take extensive research on a worldwide basis, to confirm or deny ~~these~~ initial scientific findings.

(B)

-oOo-

D IV/c