DRAFT

November 2, 1971

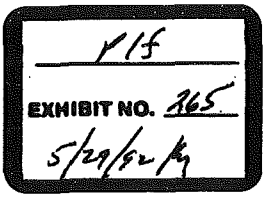
Dr. Robert W. Risebrough
Associate Research Ecologist
Bodega Marine Laboratory
University of California
P. O. Box 247
Bodega Bay, California 94923

Dear Dr. Risebrough:

I understand and respect the strong belief you express in your letter dated October 25 that in your opinion we cannot adequately protect the environment unless it is possible to relate PCB production figures and environmental input to contamination levels in fish and other components of the biosphere.

I agree that our responsibilities should include consideration of all other persons who may eventually be affected by PCB contamination of the environment in addition to our employees, shareholders, and customers.

It is with these responsibilities in mind that we have been reluctant to divulge PCB usage numbers to the general public. We are extremely concerned and sincerely believe that the abstract numbers will be misunderstood, misinterpreted, misapplied and in some instances used to arouse emotions to further some self-seeking causes.



HARTOLDMON0024969

To fully comprehend the significance of these numbers one must consider in depth the conditions under which PCB's are manufactured, stored, shipped and used. Quantities escaping into the environment in the past and now must be estimated. The isomer content of each commercial PCB mixture must be known and the degradability of each isomer must be considered. I am certain you can appreciate the overall complexity of such a study.

Monsanto has been repeatedly accused of callously refusing to divulge usage data. On the contrary, we have on many occasions expressed our willingness to discuss this information with responsible members of governmental agencies on a confidential basis for the eventual use of the information in scientific studies.

Recently arrangements have been made with Dr. Edward Berger, Jr. of the Office of Science and Technology for a thorough discussion of this data with a representative of the federal PCB Task Force. Once the data is available and viewed in the proper perspective the federal agencies represented on the Task Force will be able to take appropriate actions to fulfill their responsibilities of protecting the public and the environment.

Sincerely,

W. B. Papageorge, Manager
Environmental Protection

TRAN 0653

cc: Professor Edward D. Goldberg
Scripps Institution of Oceanography
La Jolla, California

Dr. H. S. Olcott
Professor, Marine Food Sciences
Institute of Marine Resources
College of Agriculture & Environmental Sciences
University of California, Davis
Davis, California 95616

The Honorable Gaylord Nelson
United States Senate
Washington, D.C. 20510

The Honorable George McGovern
United States Senate
Washington, D.C. 20510

Mr. Michael W. Palmer
Environmental Defense Fund
2728 Durant Avenue
Berkeley, California 94704

HARTOLDMON0024971

DRAFT 11/4/71 (DCJ)

TYPE ON MICC LETTERHEAD

November 4, 1971

Dr. Robert W. Risebrough
Associate Research Ecologist
Bodega Marine Laboratory
University of California
P. O. Box 247
Bodega Bay, California 94923

Dear Dr. Risebrough:

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It is the Company's position with respect to possible PCB contamination of the environment that our responsibilities should and do include not only consideration of our employes, shareholders and customers but also consideration of all other persons who may eventually be affected by such contamination.

It is with these responsibilities in mind that we have been reluctant to divulge PCB usage numbers to the general public. We are extremely concerned and sincerely believe that the abstract production figures can be misunderstood, misinterpreted and misapplied to the detriment of the interests of both the public and the Company.

HARTOLDMON0024972

To fully comprehend the significance of production numbers one must consider in depth the conditions under which PCB's are manufactured, stored, shipped and used. Also, estimates must be made on quantities of the product which have escaped in the past and are presently escaping into the environment. The isomer content of each

cont p. 2

HARTOLDMON0024973

Monsanto

MONSANTO INDUSTRIAL CHEMICALS CO.
800 N. Lindbergh Boulevard
St. Louis, Missouri 63166
Phone: (314) 694-1000

November 4, 1971

Dr. Robert W. Risebrough
Associate Research Ecologist
Bodega Marine Laboratory
University of California
P. O. Box 247
Bodega Bay, California 94923

Dear Dr. Risebrough:

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TRAN 065401

HARTOLDMON0024974

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Monsanto has been repeatedly accused of callously refusing to divulge usage data. On the contrary, we have on many occasions expressed our willingness to disclose such information to responsible members of governmental agencies on a confidential basis to enable them to correctly establish the present and future levels of PCB's escaping to the environment.

As you are already aware, we have announced publically our intention of supporting and working closely with the Joint Agency Task Force which was established recently to study the PCB problem. We have already attended a series of meetings with Dr. Edward J. Burger, Executive Office of the President-Office of Science and Technology. Dr. Burger is the coordinator of this task force and we have agreed to supply detailed statistical information to enable his group to investigate the present and future build up of PCB's in the environment. We are currently preparing detailed information of U.S. manufacture, sales, and usage patterns for PCB's covering a period of several years. This information will be amplified by detailed discussions with Dr. Burger and his colleagues to supply them with the maximum amount of information which will enable them to complete their studies.

We believe the actions we are now taking in cooperating with the Joint Agency Task Force are in the best interests of the general public and we are certain that when the work has been completed information will be made available to the public as part of a complete and thorough scientific study.

Sincerely,

W. B. Papageorge, Manager
Environmental Protection

/jf

TRAN 065402

HARTOLDMON0024975

cc: Professor Edward D. Goldberg
Scripps Institution of Oceanography
La Jolla, California

Dr. H. S. Olcott
Professor, Marine Food Sciences
Institute of Marine Resources
College of Agriculture & Environmental Sciences
University of California, Davis
Davis, California 95616

The Honorable Gaylord Nelson
United States Senate
Washington, D.C. 20510

The Honorable George McGovern
United States Senate
Washington, D.C. 20510

Mr. Michael W. Palmer
Environmental Defense Fund
2728 Durant Avenue
Berkeley, California 94704

HARTOLDMON0024976

PCB - Cancer

November 4, 1971

Dr. Robert W. Risebrough
Associate Research Ecologist
Bodega Marine Laboratory
University of California
P. O. Box 247
Bodega Bay, California 94923

Dear Dr. Risebrough:

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TRAN 064694

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Sincerely,

W. B. Papageorge, Manager
Environmental Protection

WBP/bt

cc: Professor Edward D. Goldberg
Scripps Institution of Oceanography
La Jolla, California

TRAN 064695

cc: The Honorable George McGovern
United States Senate
Washington, D.C. 20510

The Honorable Gaylord Nelson
United States Senate
Washington, D.C. 20510

Dr. H. S. Olcott
Professor, Marine Resources
College of Agriculture & Environmental Sciences
University of California, Davis
Davis, California 95616

Mr. Michael W. Palmer
Environmental Defense Fund
2728 Durant Avenue
Berkeley, California 94704

bcc: H. H. Bible
W. R. Corey
C. P. Cunningham
E. V. John
J. Mason
E. J. Putzell, Jr.

TRAN 064696

UNIVERSITY OF CALIFORNIA

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO SANTA BARBARA • SANTA CRUZ

BODEGA MARINE LABORATORY

P. O. BOX 247
BODEGA BAY, CALIFORNIA 94923

October 25, 1971

Mr. W. B. Papageorge
Manager, Environmental Control
Monsanto Company
800 N. Lindbergh Boulevard
St. Louis, Missouri 63166

Dear Mr. Papageorge:

Public interest in PCB and the effects of environmental contamination by PCB has evidently increased since your visit to our laboratory in Berkeley.

Among the current research priorities of pollution ecologists is the determination of accumulation rates and mass balance equations of PCB in "sinks" such as the oceans. An approach to the formulation of a mass balance equation for the DDT compounds in the oceans was made in a recent publication of the National Academy of Sciences entitled "Chlorinated Hydrocarbons in the Marine Environment". The problem is now of crucial importance since it is possible that the amounts of PCB already manufactured and that will be released eventually into the environment are sufficient to increase PCB concentrations in marine fish of the coastal waters beyond acceptable limits.

In a letter of April 6, 1971 to Dr. S. G. Herman in response to his request for information about PCB production figures in the United States you wrote:
"Regarding your question of divulging sensitive marketing information, I regret I cannot help you. We believe the information would be of extremely limited value since the PCB problem is worldwide and there are producers in Germany, France, Italy, Spain, Japan, Poland, Czechoslovakia and Russia. We also believe we have a responsibility to our employees, shareholders and in some cases to our customers to preserve the business while taking responsible action to reduce PCB contamination".

TRAN 064685

We currently have some information about PCB production figures in Japan which are sufficiently high to indicate that knowledge of production figures in other industrial countries is badly needed if we are to predict future levels of oceanic contamination.

In addition to your responsibility to your employees, shareholders and customers, there is also an evident responsibility to all other persons who may eventually be affected by PCB contamination of the environment.

The Monsanto Company has made several commendable steps in recognizing the environmental hazards of PCB and in reducing the input of PCB to the environment. Contrary to the announcement by Monsanto, however, that PCB useage would be restricted to closed-system applications, PCB has continued to be used in various paper products until it was found that foods were becoming contaminated with PCB from recycled paper. Moreover,some of the closed systems have an evident tendency to leak.

If input of PCB into the environment could be substantially reduced so that steady state levels were considerably below those now found in our coastal waters, there would be no need to call for a complete ban on the use of these chemicals. But we can not adequately protect the environment unless it is possible to relate production figures and environmental input to contamination levels in fish and other components of the biosphere. To do this it is absolutely essential that production and use figures be made public.

I hope that Monsanto will agree to cooperate with the environmental science community to protect what is evidently the public interest.

Very truly yours,

Robert W. Risebrough
Associate Research Ecologist

cc: Professor E.D.Goldberg
Professor H.S.Olcott
Senator Gaylord Nelson
Senator George McGovern
Mr. Michael Palmer, Environmental Defense Fund

TRAN 064686

April 6, 1971

Dr. S. G. Herman
Dept. of Biological Sciences
University of California, Santa Barbara
Santa Barbara, California 93106

Dear Dr. Herman:

Your letter dated March 24, 1971 was forwarded to me for response since I have the responsibility for managing Monsanto's participation in the PCB environmental problem.

I am pleased to report to you that progress on our five-point program has been gratifying. The status of each point is as follows:

1. Sales of PCB's for plasticizer use were discontinued on August 30, 1970.

2. Our industrial and hydraulic fluids have all been reformulated to exclude PCB's. Over 60% were reformulated by the end of 1970. The remaining 40% were delayed due to technological difficulties which were finally resolved by April 1, 1971.

3. Collection of spent dielectric fluid for regeneration or incineration which started in April of last year continues. We have received about 1 million pounds of the material during the past 12 months. The high temperature incinerator-scrubber system is now under construction and should be in full operation by June 1.

4. Our heat transfer fluids control program is progressing extremely well with the enthusiastic support of our customers. Many systems were converted to fluids which do not contain PCB's.

TRAN 063615

5. Research programs have contributed significantly toward the development of alternative materials and have resulted in a more biodegradable mixture of PCB isomers which some of our customers are now evaluating.

In the 1950's researchers with the U.S. Department of Agriculture conducted studies that indicated the polychlorinated biphenyls were effective vapor pressure suppressants and would increase the persistence of certain insecticides. Monsanto included this information in some of its marketing publications. This business never did grow to any significant size and we referred it to distributors who sell various chemicals including Monsanto's. To our knowledge the business was sporadic and no shipment exceeded a dozen drums (about 600 pounds each).

These insecticide formulations were never broadcast over food or textile crops as is commonly believed. They were intended primarily for indoor use for flies, silverfish, roaches, etc.

On April 13, 1970 Monsanto's Medical Director, Dr. R. E. Kelly, wrote to Dr. H. W. Hayes, then the Director of the Pesticide Regulation Division, U.S.D.A., strongly recommending that during 1970 when pesticide formulations were being re-registered that PCB's be excluded. On October 29, 1970 the Division issued PR Notice 70-25 informing pesticide formulators that PCB's were not acceptable and that within six months must be excluded from all pesticides.

Regarding your question of divulging sensitive marketing information, I regret I cannot help you. We believe the information would be of extremely limited value since the PCB problem is worldwide and there are producers in Germany, France, Italy, Spain, Japan, Poland, Czechoslovakia and Russia. We also believe we have a responsibility to our employees, shareholders and in some cases to our customers to preserve the business while taking responsible action to reduce PCB contamination.

We recognize, however, the extreme interest that has been generated for this information and have offered to give to any responsible governmental agency this information on a confidential basis and to be used for scientific purposes. So far no agency has made a request on this basis.

TRAN 063616

I hope this information is useful to you. If I can be of further service, please let me know.

Sincerely,

W. B. Papageorge
Manager
Environmental Control

WBP:ms