BCC: P. G. BENIGNUS
D. A. OLSON

July 6, 1970

Mr. D. E. Cavenaugh
Espey Manufacturing Company
P. O. Box 422
Saratoga Springs, New York 12866

Dear Mr. Cavenaugh:

Last month when Randy Graham and I visited your plant to discuss the PCB problem, we did not intend to cause undue alarm or create any panic concerning the use and handling of polychlorinated biphenyls. We were primarily interested in sharing our current knowledge of the situation with you and offered to help wherever we could.

All studies that we are aware of indicate that PCB's, which are present in Monsanto's Aroclors, are not acute poisons to humans and other mammals, but do effect some species of birds and marine life. However, since they are chlorinated hydrocarbons, personnel working with these materials should be protected from prolonged breathing of the fumes and from skin contact with the liquid. Ventilation should be provided to keep the concentration in the working area below 0.5 - 1.0 milligram per cubic meter of air.

To prevent the escape of PCB's to the environment calls for a level of control and housekeeping many of us have never been asked to achieve in the past. Every effort must be made to prevent leakage and spillage. Maintenance must be kept at a very high standard. For those areas where leakage and spills will occasionally occur, catch pans must be provided. These pans must drain to a collecting basin or be emptied by responsible employees on a scheduled basis.

Mixing of Aroclors with waste water streams should be avoided since separation of PCB's from water can be costly. If mixing cannot be avoided, a catch basin and settling pond should be provided to separate the heavy Aroclor from the water.

Unusable contaminated Aroclor should be disposed by incineration which assures complete destruction to CO_2, H_2O, and HCl. Any incineration below 800°C will result in vaporization which will contaminate the atmosphere or in partial oxidation which may yield materials which are highly toxic.

To help our customers with their liquid disposal problems, we have offered to accept for future incineration scrap liquid Aroclors shipped to Monsanto Company, W. G. Krummrich Plant, Sauget, Illinois, Attention Supervisor, Department 246. The charge for this disposal is 3¢ per pound of material. This charge is tentative pending a complete evaluation of incineration costs and does not include freight or container costs.

Contamination of the atmosphere must also be eliminated. All handling systems must be closed wherever possible. Fumes exhausted from a tank, vessel, or working area must be trapped and collected using condensers and entrainment separators.

Solids contaminated with PCB's pose a greater challenge. Until a proper incinerator is designed we are suggesting that disposal be made in an authorized, properly operated land fill away from any water systems. These solids include treatment clays, absorbing materials used to contain spills, rags, windings and containers.

In summary, control of PCB's can be achieved with equipment engineered to prevent losses and maintained properly coupled with good manufacturing practices which result in a high standard of housekeeping.

From the interest and concern which you have expressed I am certain that you will do all you can to reduce the escape of PCB's from your operation. When all of us succeed in this objective, I am certain that no regulatory agency will be compelled to take precipitous action regarding the use of PCB's in vital applications.

Sincerely,
Original Signed by W. B. Papageorge

W. B. PAPAGEORGE, Manager
Environmental Control

cc: G.R.Graham

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