bcc: R. E. Keller - Res. 1
W. Farrar - Res. 1
R. Richard - GO
E. P. Wheeler - GO
W. B. Papageorge - Anniston

Monsanto

ORGANIC CHEMICALS DIVISION

Monsanto Company
1700 South Second Street
St. Louis, Missouri 63177
Phone: (314) 621-4000

FF
Answers

January 28, 1970

Mr. Donald Swanson
Aerometry Division
National Air Pollution Control
Administration
1055 Laidlaw Avenue
Cincinnati, Ohio 45237

Dear Mr. Swanson:

As per Elmer Wheeler's 1-14-70 letter, I am sending a copy of a method we have employed for the analysis of water and sediment for polychlorinated biphenyls (PCB).

From time to time, we have done some air sampling which I assume is more pertinent to your needs. We usually draw 200-250 liters of air through sec-butanol in a trap of some sort. The alcohol is then diluted with a large excess of water and extracted with hexane (a more suitable solvent for electron capture gas chromatography). The hexane is then washed several times with water to remove any residual alcohol and the hexane extracts analyzed for PCBs as outlined in the enclosed method. It occurs to me that an alternate solvent to sec-butanol, which might be even better to work with is dimethyl formamide. It is less soluble in hexane and it has the necessary characteristics for air sampling. We have not tried this but it appears to be worth looking at.

If I can be of any further assistance, please don't hesitate to call me collect at - Area Code 314, 621-4000, Extension 3480.

Sincerely,

E. Scott Tucker
Senior Research Chemist
Applied Sciences Section

db
Enclosure

DSW 162158