Elmer P. Wheeler, Medical Department

September 11, 1969

Invoice for WARF Institute Study

H. S. Bergen, HBERG
M. W. Farrar, S. Second St.
R. E. Keller, S. Second St.
W. R. Richard, WRICH
J. E. Springate, JSPRI

Howard L. Minckler
HMINC

Enclosed is an invoice and a request for disbursement for Monsanto's support of the Wisconsin Alumni Research Foundation Study of Lake Michigan.

You will recall this study is an attempt to determine sources of contamination of the Lake by DDT, Dieldrin and other chlorinated hydrocarbons--and PCB's. Originally the study was to be sponsored by the DDT and dieldrin manufacturers including Shell, Stauffer and Montrose. We were asked to support the study since one-fourth of the samples to be taken were to be analyzed for PCB's. Recently Diamond Shamrock has also joined in support of the project.

The study is to examine the presence of the chlorinated hydrocarbons in Lake Michigan and streams tributary thereto. Samples for analysis will include water and sediment at the mouth of the tributaries, water and plankton at short distances in the Lake at the mouth of the tributaries, and water and fish in the general area of the tributaries about one mile from shore.

More than 500 samples were collected by the project study team in June. A very preliminary report of the analysis of 61 of the water samples is attached and shows in parts per trillion the levels of contaminants found. In eight of the samples, Aroclor 1254 was identified. In an additional nine samples there was such a spectrum of interfering substances that the original analyses were somewhat confused.

The locations of the samples in which Aroclor was found is shown on the rough map attached.

In a telephone conversation the WARF group has indicated some difficulties in their analytical techniques, particularly insofar as the Aroclor identification is concerned. We have been asked to have someone from Bob Keller's group visit WARF for a full discussion of analytical problems--or alternatively have the WARF analysts come to St. Louis. I am working with Bob Keller on an appropriate interchange of information.

The results of the WARF Study are being discussed with the federal and state agencies which are conducting their own sampling and analysis studies on Lake Michigan. I believe this makes it imperative for us to continue support of the WARF project.

Elmer P. Wheeler

EPW:ju

Enclosures