2-25-70

Elmer,
Per our discussion please forward to Otis Fancher. This was prepared as a rough copy for your use. Thanks
Bob K.

FEB 26 1970

Monsanto

ORGANIC CHEMICALS DIVISION

Monsanto Company
4700 South Second Street
St. Louis, Missouri 63177
Phone: (314) 821-4000

February 24, 1970

Dr. Otis Fancher
Director
Industrial Bio-Test Laboratories, Inc.
1816 Frontage Road
Northbrook, Illinois 60062

Dear Otis:

Put in your own words!

Regarding our phone conversation with regards to the determination of 96-hour median tolerance limits (TL_m). It has been agreed with E. P. Wheeler and W. R. Richard that there is a need to re-determine 96-hour TL_m(s) according to "Standard Methods" no matter how high the exposure levels have to be pushed to cause complete mortality. We, therefore, would like to request that your laboratory again perform these studies for Monsanto.

The study should be carried out on Blue Gills and Bullheads at three Aroclor exposure levels:

Lower concentration - all fish survive
Median concentration - less than all fish survive
Upper concentration - none of the fish survive

with Aroclors 1242 (Lot No. AK-255), 1254 (Lot No. AK-38), and 1260 (Lot No. AK-3).

The samples which should be retained and shipped to Monsanto for PCB analysis should be as follows:

I. Zero time water samples (~50 ml) taken from each Aroclor-Fish exposure tank, [Sample(s)/Aroclor/Level/Specie = (1X3X3X2) = 18 Total] and 1, 2, 3, 6, 12, 24, 48, 72 and 96 hour water samples (~50 ml) from each of the lowest level Aroclor exposure tanks [(9X3X1X2) = 54 Total].

II. All fish mortalities.

III. We would also like to have blank exposure tanks (no fish) set up ~~and used~~ exactly as the tanks containing the fish, at the same time, and 0, 1, 2, 3, 6, 12, 24, 48, 72, and 96 hours water samples (~50 ml) taken from each. [Sample(s)/Aroclor/Level - 10X3X3 = 90 Total].

IV. Additionally, two blank tanks containing fish but no Aroclors should be set up and water samples (~50 ml) taken at 0, 1, 2, 3, 6, 12, 24, 48, 72 and 96 hours and the fish sacrificed for analysis [(sample(s)/species) = 10X2 = 20 Total].

The water samples should be taken in previously cleaned amber glass vials and [redacted] sealed with foil lined screw caps. Fish mortalities and sacrifices should be washed with distilled water, blotted dry, and quick frozen in poly bags. We would also suggest that the exposure tanks be washed thoroughly and not be re-used.

We would appreciate any counsel you or Carmen might want to provide to make the study more efficient or complete.

~~If you are in agreement with the above, please notify me when the study is started.~~

~~Very truly yours,~~

~~E. S. Tucker~~

db

cc: M. W. Farrar
J. T. Garrett/E. P. Wheeler
R. E. Keller
W. B. Papageorge
W. R. Richard