March 4, 1970

Dr. Otis Fancher
Industrial Bio-Test Laboratory, Inc.
1810 Frontage Road
Northbrook, Illinois 60062

Dear Otis:

I believe Scott Tucker talked to you on the phone about redoing the fish toxicity work. This letter requests 96-hour TL_m(s) be determined using the "standard methods" regardless of how high the exposure levels have to be pushed to cause complete mortality. The exposure levels we are talking about are the amounts of the Aroclor added to the tank to reach the mortality levels.

I think it has been agreed that these studies 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 = (1X3X1X2) = 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 exactly as the tanks containing fish, at the same time, and 0, 1, 2, 3, 6, 12, 24, 48, 74, 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 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.

If there is anything that we can add to the above or if you or Carmen have additional comments, please call Scott Tucker.

Best personal regards.

Sincerely,

Elmer P. Wheeler
Manager, Environmental Health

EPW:ju
c.c. Dr. Joseph C. Calandra
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