Based upon the data we have gathered to date on the other Aroclor products, it can probably be stated with a fair amount of certainty that this product would be classified in either the Partially Biodegradable I (50%-90%) class or the Biodegradable class. Figure IV shows the trend observed when the SCAS disappearance rates, so far measured, are plotted as a function of the % chlorine present in the product. On this basis, MCS 1109 should fall somewhere between Aroclor 1221 and biphenyl, supporting the above statement.

Aroclor 1221 also showed evidence of degradation when exposed to river water while Aroclor 1242 did not. MCS 1109 again should show greater evidence of RDA degradation than Aroclor 1221.

Cumming also asks if MCS's have been observed in environmental samples and indicates that it might be a good thing to report results as % di, % tri, % tetra, etc.

In answer to his first question, I can say that in "weathered" biological residues, we have never seen MCB nor have any of the other workers to the best of our knowledge.

In a manner of speaking, we always have reported "qualitatively" the homologs which are present in the residues. If a residue is reported as Aroclor 1242 or Aroclor 1254, it means just that, i.e., that the dominant homologs observed were di, tri, and tetra or tetra, penta, and hexa. In order to report these as actual percentages, one would need to know which specific isomers were in each peak (packed columns do not yield complete resolution) and a responce factor for each individual isomer.

E. S. Tucker

db
Attach. - 4