February 28, 1972

Mr. Eugene N. Cramer
Engineer for Advanced Energy Systems
Southern California Edison Company
P. O. Box 800
2244 Walnut Grove Avenue
Rosemead, California 91770

Dear Mr. Cramer:

In your letter to me dated January 18, 1972, you asked whether certain polychlorinated biphenyls produced by Monsanto are persistent chlorinated hydrocarbons within the meaning of Section 18 of an initiative measure known as the Clean Environment Act, a copy of which you enclosed with your letter. You specifically mentioned Aroclor 1254, Aroclor 1216 and MCS 1016. Incidentally, we do not manufacture a product with the name Aroclor 1216. Aroclor 1254, Aroclor 1016 and MCS 1016 do contain polychlorinated biphenyls. Aroclor 1016 contains mono to tetra-chlorinated biphenyls. In this product we have limited the amount of higher chlorinated biphenyls. The specification calls for 0.4% maximum penta and hexachlorobiphenyl.

As we read Section 18 of the proposed Clean Environment Act text which you forwarded, it defines the term "persistent chlorinated hydrocarbons" as being any of a number of specifically named products. Polychlorinated biphenyls do not appear to us to have been named in Section 18 and, therefore, would not seem to come within the scope of the statutory definition of "persistent chlorinated hydrocarbons".

In a more general sense, however, it is our opinion that polychlorinated biphenyls can be correctly referred to as chlorinated hydrocarbons. Polychlorinated biphenyls are made up of chlorine, carbon and hydrogen.

For your purposes in deciding what position to take with respect to the proposed Clean Environment Act, we strongly recommend that you seek the counsel of attorneys for your company, or independent counsel in California to assist you in interpreting the proposed statutory wording.

References to biodegradation of PCB's are reported in:

*Grant, D. L., W. E. J. Phillips & D. C. Villeneuve, 1971. Metabolism of a polychlorinated biphenyl (Aroclor 1254) mixture in the rat. Bull. Environ. Contam. & Toxicol. 6(2):102-112.

Curley, A., V. W. Burse, N. E. Orim, R. W. Jennings & R. E. Linder, 1971. Polychlorinated biphenyls: distribution and storage in body fluids and tissues of Sherman rats. Unpublished MS., Environmental Protection Agency.

We hope our response and the literature referred to may be of assistance in developing your company's position on this proposed legislation.

Very truly yours,

William R. Richard
Manager, R&D
Specialty Products

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*The article states:

"Figure 1 and Table IV show that the components of the Aroclor 1254 mixture with the shorter retention times, peaks 1, 2 and 3, and presumably with the lowest chlorine contents (10) were metabolized to a greater degree than those with the longer retention times. This observation agrees with that reported in studies with Phenochlor DP6* fed to Japanese Quail (7)."