

56-37



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
ENVIRONMENTAL RESEARCH LABORATORY  
SOUTH FERRY ROAD  
NARRAGANSETT, RHODE ISLAND 02882

August 13, 1981

Roger Goyette  
State Representative  
11th Bristol District  
2767 Acushnet Avenue  
New Bedford, MA 02745

Dear Mr. Goyette:

Aroclors are mixtures of numerous isomers of chlorinated biphenyls. In mixtures such as Aroclor 1242, 1254 and 1260 the last 2 digits represent the percent by weight of chlorine in these formulations. Several years ago the practice of quantifying PCB's using "standards" representative of one or several Aroclor mixtures became common. Since PCB isomers with 5 and 6 chlorine atoms were found most often in environmental samples the most used "standard" for quantifying these mixtures was Aroclor 1254. Using higher resolution analytical instrumentation it is now possible to see that the mixtures of PCB isomers in environmental samples are not exact duplicates of the Aroclor PCB mixtures. In addition, in many samples the PCB mixtures found show a broad molecular weight range of compounds indicating that these samples contain several altered Aroclor formulations. Since numerous individual PCB isomers are toxic it is most important, from my viewpoint, to evaluate environmental samples for their entire content of PCB compounds. Naturally the quantitation methodology utilized should be applicable to the compounds being analyzed.

If I can be of further help please contact me.

Sincerely,  
*James Lake*  
James Lake  
ERL-Narragansett