Monsanto

FROM (NAME & LOCATION): P.L. Wright - A2SC

DATE: December 31, 1974

SUBJECT: Toxic Pollutant Effluent Standard

REFERENCE: WBP to PLW, 12/5/74

TO: W. B. Papageorge
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The draft of the "Advanced Notice of Proposed Rulemaking for Toxic Pollutant Standards" have adopted two of the suggested changes we proposed in our affidavit:

1) they removed the maximum stream flow of 10,000 cfs.

2) they removed the arbitrary safety factor of 0.6.

The current proposal establishes a maximum concentration of 0.01 µg/l to be used in conjunction with the receiving water body flow rate to calculate the total daily discharge. The basis for establishment is not given; however, it is not an unreasonable value based on the known bioaccumulation potential for PCB. (PLW to WBP, 2/21/74, PCB Effluent Standards). The acute toxicity limits for determining maximum PCB concentration at the point of introduction into the receiving water body are in accord with the available toxicity data.

Two additional approaches have been explored for modifying the maximum total daily effluent. These were:

a) include in the definition of PCB only those homologs with 4 or more chlorine atoms,

b) restrict the standard to include only the PCB's in true solution, excluding the sediment bound fraction.

EPA representatives requested that Monsanto supply data showing that the homologs with 1,2,3, and 4 chlorine atoms are biodegradable. We were also requested to determine rates of solution of PCB from sediment particles and to determine the bioavailability of PCB from sediment. Is any additional data available on either point?

EPA (Kimbrough, et al, Atlanta, Ga.) has recently informed us of the results of experiments that suggest that liver tumors in rats were caused by PCB. These findings are currently under review. If the diagnosis of liver tumors is confirmed, we can expect a very strict effluent standard.

Paul

Paul L. Wright

/bkp
att. (to all)

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