~~1-1604~~ 2. PCB. Analytical Methods

Monsanto INDUSTRIAL CHEMICALS CO.

FROM (NAME & LOCATION): J. P. Mieure - T2F

DATE : February 9, 1976

SUBJECT : ASTM PCB METHODS

REFERENCE :

cc: P. B. Benignus - B2SD
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TO : J. C. Weber
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This memo summarizes action taken at our recent meeting by ASTM D-19 on the proposed method (submitted by EPA) for PCB's and pesticides in water.

1. The method has completed all but general ASTM balloting for final approval. It will likely be issued this year.

2. Three qualifying statements were added and approved to resolve my negative vote:

   A. The following two sentences were added to the summary:

      Precision and accuracy statements reflect recoveries of PCB products dosed into water samples. These statements do not apply to environmentally altered PCB's.

   B. The following sentence was added to the calculation section:

      The overall accuracy of the test method may decrease as the degree of environmental alteration increases because of changes in the relative concentrations of unresolved components within individual GC peaks.

   C. The section on confirmatory techniques now contains the following paragraph:

      ASTM method D 3304-74 for PCB's, which incorporates a two-step chemical treatment, saponification with alcoholic potassium hydroxide followed by sulfuric acid, effectively eliminates many interferences while the PCB's are retained intact. This procedure may be used for analyses of industrial effluents when the determination of pesticides is not required and when the sensitivity of the method is adequate to meet the need.

I feel that these changes more accurately reflect the many uncertainties in determining PCB's in the environment. The first two statements are intended to limit the accuracy claims of other laboratories, which can be particularly important in enforcement situations. The latter statement should permit industry to use either of the two ASTM methods for analyzing effluents with results acceptable to regulatory agencies.

Jim

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