R. E. Duggan
Deputy Associate Commissioner for Compliance, CC-2

Director
Bureau of Foods, BF-1

PCB's in Milk Survey Data

1. Detailed below is a complete tabulation of the data from the subject program. Although the survey ended April 28, 1972, all the data was not reported until May 15, 1972.

2. It is significant to note that only 1 of 520 samples (or 0.19% of the total) exceeded the temporary tolerance of 2.5 ppm (fat basis) established for PCB's.

3.

Total Samples Requested	515
Total Samples Received	520
% Total Samples Received	101.0
Milk Samples Containing PCB's	27
% Milk Samples Containing PCB's	5.2

A breakdown of the sample results by bottling or manufacturing milk is as follows:

Bottling Milk Samples Requested	369
Bottling Milk Samples Received	360
% Bottling Milk Samples Received	97.6
Bottling Milk Samples Containing PCB's	21
% Bottling Milk Samples Containing PCB's	5.8

Range of PCB Findings - Trace to 2.8 ppm

Sample Results (fat basis)

No. Samples	PCB Levels	Aroclor
3	T	1254
1	T(0.49 ppm)	1254
1	0.2 ppm	1254
3	0.4 ppm	1254
2	0.5 ppm	1242, 1254
1	0.6 ppm	1254
1	0.7 ppm	1254
1	0.8 ppm	1254

DSW 338715

No. Samples	PCB Levels	Aroclor
2	1.0 ppm	1254
1	1.4 ppm	1254
2	1.49 ppm	1254
1	1.6 ppm	1254
1	1.9 ppm	1254
1	2.8 ppm	1254
21		

Manufacturing Milk Samples Requested	146
Manufacturing Milk Samples Received	160
% Manufacturing Milk Samples Received	109.6
Manufacturing Milk Samples Containing PCB's	6
% Manufacturing Milk Samples Containing PCB's	3.8

Range of PCB Findings - Trace to 1.8
Sample Results (fat basis)

No. Samples	PCB Levels	Aroclor
1	T(0.49 ppm)	1254
1	0.5 ppm	1254
1	0.7 ppm	1254
1	0.9 ppm	1254
1	1.3 ppm	1254
1	1.8 ppm	1254
6		

The distribution of PCB's in milk by FDA District is as follows:

District	No. Samples Containing PCB	%
ATL	5	18.5
BLT	1	3.7
BOS	1	3.7
DET	2	7.4
PHI	2	7.4
SEA	16	59.3
	27	100.0

DSW 338716

4. C. F. Jelinek, Ph.D., Program Manager, Industrial Chemicals and Heavy Metals, reports that there is a question of the validity of the reported findings down to the levels given, since the directive for the survey specifies methodology in which "the limit of detection for PCB residues in milk fat is approximately 1.5 ppm (as Aroclor 1254) when using a 3 mg. sample injection and EC-GLC operated at the above conditions." He states that if some of the analysts used a large sample size, the lower values reported would have more validity, but this could only be determined by a more detailed examination of all the data. He also indicates that the findings of Seattle District merit further investigation. Seattle reported PCB's in 16 (or 76%) of 21 samples examined. On the other hand, the other Districts reported PCB's in only 11 (or 2.2%) of the 499 samples examined. Either Seattle has a very widespread problem of PCB contamination of milk which should be looked into, or their reported findings need some other explanation.

5. A copy of the Compliance Program, Survey: Polychlorinated Biphenyls in Milk is enclosed for your review.

6. If we can be of any further assistance, please let us know.

Virgil O. Wodicka

Enclosure

cc:
CC-4 (Wessel)
BF-420 (Jelinek)
BF-300 RF
BF-320 RF
BF-323 (FT,DDT)

DDTolen: vem 5/16/72

DSW 338717