Monsanto

FROM (NAME & LOCATION) E. E. Stewart, Krummrich Plant

DATE August 31, 1971

cc: Messrs.
W. C. Engman
P. E. Heisler

SUBJECT PCB SEWER LOSSES

REFERENCE

TO : Mr. A. E. Leisy

PCB losses as measured from the plant and at the treatment plant have been as follows this year.

	Combined 24" & 30" Plant Exit Sewers	Treatment Plant Influent	Treatment Plant Effluent
January	44 #/day	84 #/day	49 #/day
February	29	50	12
March	34	25	9
April	29	76	24
May	20	68	22
June	15	77	36
July	18	20	8
August (thru 25th)	13	32	12

Losses as measured at the plant exit sewers continue to decrease slightly. Losses at the treatment plant effluent appear to be leveling and are above the plant goal of 2 #/day.

There is a discrepancy in the difference between the plant exit sewers and the treatment plant influent. These two values should be about the same. We have not found major amounts of PCB's in the flows external to the plant that combine with the plant sewer before entering the treatment plant.

Also, measurements at the department average less than 1 #/day. This is far below values from the plant or at the treatment plant.

Our immediate plans are to:

1. Obtain additional samples from an adjacent (3B) sampling spot in the 24" sewer to cross-check routine samples obtained at (2A).

Date	3B	2A
8/25/71	55 #/day	12.8 #/day
8/26	0.4	10.0
8/30	0.5	3.2
8/31	0.4	7.7

9/9 Installed high speed sampler at 2A

Slow pump	Fast pump	Pump solids
2 #/day	24	1,420

Slow pump 9/6 9/7 9/8 Composite 1 #/day

DSW 295933

IN-12 REV. 11-65

STLCOPCB4065877

9/9 Grab samples
1-B (30") 4#/day
2-A (24") 41#/day
3-B (24") 21#/day
Flume 39#/day

2. Obtain grab samples at treatment plant and possibly other locations to compare with routine samples in effort to cross-check existing sampling procedure.

8/30 52#/day at Treatment Plant
Different flume
Grab sample

3. Install additional sampler at point where department losses are measured (4Z). Will be a shift sampler and will check only for presence of two phases. Will not analyze. Sample tube to extend to bottom of sewer box. Intent is to detect slug flows from the department.

Installed 9/2/71
Composite not shift
Removed 10/1

9/8 Blowed sewer by 4/6 at 246 south west manhole 4-Z, 4-Y & 4-X

4. Compare analyses before and after blowing of sewer lines (mercury project) to note possible removal of PCB's from sewer system.

9/10 Blowed 4-O sewer to 4-A

5. Complete research work related to analysis of PCB's in sewer streams. Resolve quantitative method based on peaks or area under GLC curves.

E. E. Stewart

/emz

2A 24"

	flow	fact
9/9	2	24
9/22	1	41
9/23	1	25

3B 30"

	flow	fact
9/29	1	10
9/30	1	2

Eff

	flow	fact
2/1/72	17	10
9/30	8	6

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