Monsanto

FROM (NAME & LOCATION) J. R. Savage - St. Louis

DATE January 13, 1972

CC H. S. Bergen
P. B. Hodges B3NA

SUBJECT MONTHLY PCB REPORT
DECEMBER 1971

REFERENCE

TO : W. B. Papageorge
B2NK

A. W. G. KRUMMRICH PLANT

I. CURRENT LEVEL IN SEWERS

Aroclor sewer loss control data are attached. December losses are all time low. About 12 #/day and 6 #/day respectively at Treatment Plant Influent and Effluent. The lower chlorinated biphenyl (called Aroclor 1221) that appeared in the sewer streams in November has disappeared about mid-December. Coincides with production of Aroclor 1105. During the production of 1105-1109 about 20 #/day of 1221 (?) were getting into the sewer. If we continue to produce 1105 it will not be possible to reach our goal of 1#/day loss with the existing facilities and operating techniques.

Extensive comparison of fast vs. slow samplers, filtered vs. unfiltered samples, and comparison of different points of sample pick-up in the sewer stream would indicate the PCB content in the sewer sample to be a function of the amount of solids present. We believe the Treatment Plant Influent and Effluent samples to be most correct. Further sampling refinements being made at these points to obtain better data.

A. Aroclor Department - Early in the month, losses varied from 0.2 to 9#/day during period when 1105-1109 was being produced. Slow type sampler not truly representative of real loss occurring. Did not sample second half of the month because sampling spot at (4-Z) was not available when we re-routed the sewer flow for special testing.

Extensive sewer repair work in progress in the department to better control PCB losses within the system. Fast type sampler will be installed at department in January.

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A. W. G. Krummrich Plant (Cont.)

I. Current Level in Sewers (Cont.)

B. Total Plant - During the month, two areas of investigation were conducted to better define the magnitude and the source of PCB losses to the sewer.

1. Diversion of the sewer streams from the Aroclor department such that all department flow was directed to the North and not permitted to flow into the internal plant sewer system which exits at the 24" and 30" sewers. This test was conducted between 12/16 and 12/30. About a 60% reduction in PCB losses were noted at the 24" and 30" sewers from the plant.

2. Slow vs. fast sewer samplers were evaluated from 12/10 thru 12/29. Fast samplers will have results about three times the amount measured with slow samplers.

At present, we have both slow and fast samplers installed at the 24" and 30" exit plant sewers. The attached graphs for the 24" and 30" sewers are results taken with slow samplers. Additional refinements must be made before we switch permanently to fast samplers. Expect to perfect sampling procedure in January.

C. Treatment Plant Effluent - The average daily loss of 6 #/day is record low. Includes the equivalent of 2 #/day of Aroclor 1221 (?), and results obtained with fast sampler. Expect this to approach 2 #/day average when producing Aroclors 1142 and higher.

II. PROJECT STATUS

Estimate No.

2422 "Paving and Curbing" - To contain losses in tank car and storage are in Dept. 246. Curbing and pads complete. Major sewer to be installed to North. EDC extended to 2/1/72.

3102 "Enlarge Aroclor Settling Basin" - To permit containment of possible losses in the operating department - In progress, EDC extended to 2/1/72.

A. W. G. Krummrich Plant (Cont.)

II. Project Status (Cont.)

(Estimate No.)

3438 "Eliminate Underground Sewers 246" - Alter and repair departmental sewer system to eliminate cross flow of sewer water and underground water within the department. Essentially complete.

3500 "Repair Sewer and Paving in Second Street" - To eliminate cross flow of sewer water and underground water in area. Estimate approved. Design to begin week of 1/10/72. EDC 4/1/72.

III. PROGRAM STATUS

Isokinetic samplers to be installed at Treatment Plant Influent and at Department (4-Z).

Definitive longer range plans to be prepared in January. Did not do in December.

B. ANNISTON PLANT

I. CURRENT LEVEL IN SEWERS

Total Aroclor losses during December 1971 averaged 0.72 lb./day (73 ppb). The Aroclor (1242 and 1254) losses reported to the E.P.A. and the State of Alabama averaged 0.37 lbs./day (37 ppb). This 0.41 lbs./day increase in total Aroclor losses in December over November is a result of being forced to change back to the #2 limestone pit because of a lining failure in the #1 pit.

II. PROJECT

No changes from November.

III. SPILLS

There were no Aroclor spills in December.

J. R. Savage

/bi
Attachment