Monsanto

COMPANY CONFIDENTIAL

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

DATE: February 2, 1972

SUBJECT: STATUS - PCB POLLUTION CONTROL PROGRAM

REFERENCE:

TO: Mr. J. R. Savage
General Offices
B-2-N

cc: Messrs.
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This is the February 1, 1972 status of the PCB pollution control program.

I. PCB LEVEL IN SEWERS

Aroclor sewer loss control data are attached. January losses from the plant were about the same as December. Losses from the Treatment Plant to the river were about twice as great in January as they were in December. Losses were erratic with high and low values intermixed. All losses reflect the lower chlorinated biphenyls (< 1232) which are present in the sewer streams when producing Aroclor 1105.

Routine sampling of various streams have been confined to the Waste Treatment Plant Influent and Effluent streams. It is believed these points best reflect losses from the plant (WTP Influent) and losses to the river (WTP Effluent).

A. Aroclor Department - Discontinued routine sampling from the department. Results that were being obtained from the slow speed sampler were not of the degree required for effective control purposes. A project has been approved and design is in progress that will provide the facilities required to measure the flow and to obtain an isokinetic sample from the major sewer stream at the department. Expect within 2-3 months.

During period 1/7-1/12 the settling basin in the department was not in service because of alterations being made to expand the basin. Losses measured at the Waste Treatment Plant averaged about 23 #/day.

Previous calculations indicated that < 0.1 # PCB/day was the amount expected in the off-gas from the department. Recent calculations indicates this amount could be as high as 10 # PCB/day. If recent calculations are correct we will have to think of changes required in the existing off-gas purification. Calculations to be verified.

MONS 099072

I. PCB LEVEL IN SEWERS (contd.)

B. Total Plant

Losses at the Waste Treatment Plant Influent of 13 #/day were about the same as the record low of 12 #/day established in December.

Comparative results in-plant between slow and isokinetic flip-flop samplers are quite divergent. It is believed the slow samplers do not pick up a representative sample with solids from the stream. In-plant routine sampling with slow samplers has been discontinued.

Comparative results of the Waste Treatment Plant Influent samples with the drum and the flip-flop samplers are also divergent. We believe better results can be obtained from the flip-flop sampler than from the drum sampler. Comparative data being obtained. The flip-flop sampler presently installed at the influent Parshall flume is the best installation we know of at this time. Has been designed as close to isokinetic conditions as possible and sample intake is from converging section of the flume.

C. Treatment Plant Effluent

January losses at this point were 11 #/day compared with 5 #/day average December losses. Reasons for higher losses not known. Waste treatment plant condition (pH, solids, sample handling, etc.) will be reviewed in attempt to determine reason.

An isokinetic flip-flop sampler has been placed at effluent to get comparative results with drum. This point is critical because it is this point where goal of 1 #/day must be achieved.

II. PROJECT STATUS

Estimate No.

2422 "Paving and Curbing" - This project completed during month, 1/19. All flow from the department to the North and from track area must now pass through a settling basin.

II. PROJECT STATUS (continued)

Estimate No.

3102 "Enlarge Aroclor Settling Basin" - Enlargement of existing basin to permit containment of possible losses in the operating department. In progress - EDC extended to 2/15/72.

3500 "Repair Sewer and Paving in Second Street" - To eliminate cross flow of sewer water and underground water in area. Design to be complete in February. EDC 4/1/72.

Minor Trailer modified at Rip Track area to permit settling of all washes from PCB T/C and T/T before sewering wash water. Put in service 1/26/72.

III. PROGRAM STATUS

Definitive longer range plans to be issued in February, delayed in January.

Edward E. Stewart
Technical Services Department

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WASTE TREATMENT PLANT - INFLUENT
WASTE TREATMENT PLANT - EFFLUENT
PCB LOSSES (POUNDS PER DAY)
80
70
60
50
40
30
20
10
0
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