Monsanto

COMPANY CONFIDENTIAL

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

DATE: May 2, 1972

SUBJECT: STATUS - PCB POLLUTION CONTROL PROGRAM

REFERENCE:

TO: Mr. J. R. Savage
General Offices
B2SL

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This is the May 1, 1972 status of the PCB pollution control program.

I. PCB LEVEL IN SEWERS

Aroclor sewer loss control data thru 4/26 are attached. April PCB losses to and from the Waste Treatment Plant about the same level as last month. Effluent level seems to have stabilized about 10 #/day. Future activities will be directed to controls and reduction of losses at the manufacturing department.

A. Aroclor Department - Major sewer repair project and provision of facilities to measure the flow and obtain samples from the department are under construction with completion expected by 6/1.

During April the department operated at reduced rates. The continuous chlorinators operated about 42% of full rate and the batch chlorinators operated 27% of the time. < 1% of the off-gas generated at the Aroclor department was sewered at the department. It is estimated that at least 95% of the Aroclor off-gas was used to produce chlorosulfonic acid. Possibly 5% may have been sewered at the chlorophenol department. Piping modifications have been made to prevent sewering Aroclor off-gas at the chlorophenol department, and an operating policy is in effect to not operate the Aroclor department when the off-gas has to be drowned to the sewer. The department did not operate after 4/22 during a chlorosulfonic acid department planned maintenance shutdown.

Off-gas scrubbing laboratory tests are in progress to find a scrubbing media that can be used to further scrub the HCl off-gas from the Aroclor department. Expect research and design to be complete in May.

I. PCB LEVEL IN SEWERS

A. (continued)

A tentative amendment to the process has been prepared to discontinue removing excess HCl from the crude Aroclor by aeration. Potential PCB losses to the sewer that result from air blowing is the second largest known routine loss to the sewers (1-2 #/day). Additional lime will be added to neutralize the free HCl in the crude.

B. Total Plant - Losses measured at the Waste Treatment Plant Influent were about 24 #/day compared with 27 #/day last month.

Completed testing of sewer samplers and have agreed that isokinetic Flip-Flop samplers will be installed at all points where it is desirable to monitor streams. This change in sampling procedure will go into effect on 5/1/72. Comparative analyses in the past would indicate results from the flip-flop to be more uniform and slightly higher than from the drum.

A statistical method for recording and reporting losses will be developed to better indicate trends rather than individual peaks and valleys normally present when plotting individual data points.

C. Treatment Plant Effluent - April losses of 10 #/day compare with 11 #/day last month. The flip-flop sampler will be in service on 5/1/72, and statistical recording of data will be employed.

II. PROJECT STATUS

Estimate No. 3500 - "Repair Sewer and Paving in Second Street" - In progress. Expect completion in May.

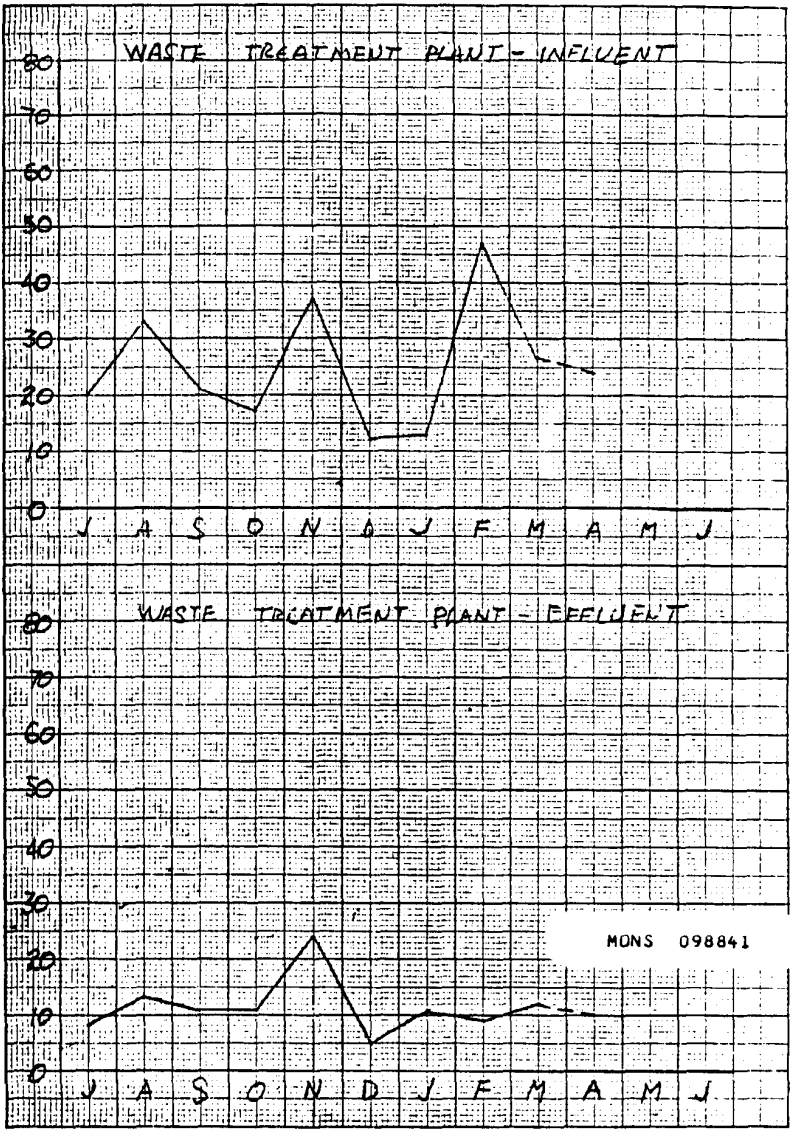
Project being prepared to pump from North Settling Basin to the South unit so that all flows from the department will flow through the soon to be completed flow and sampling station.

III. PROGRAM STATUS

Following the program issued in February. Current status is attached. This should permit reduction to about 1 #/day during 4th quarter of 1972.

Edward E. Stewart
Technical Services Department

/tm
att.



MONS 098841

K-E 20 X 20 TO THE INCH 46 1240
7 X 10 INCHES
KEUFFEL & ESSER CO.

OFF-GAS SCRUBBER

Production

Daily check and record of demister operation and off-gas temperature control. (In progress)

(In progress)

Coordinate 246 production with 217 and sewer excess gas from 236 at 236. (March start)

(Complete - In effect)

Maintenance

Technical Services

Verify off-gas calculated losses (3/3)

Scrubbing process defined & demonstrate in Lab. (March & April)

Propare project (Estimate) to scrub off-gas. (March & April)

Coordinate design of WGK scrubber activity with CED activity related to 1109 design.

(Not complete
Research & Design in progress)

AIR-BLOW REDUCTIONS

Production

Step-down air blowing and minimize production of < 1248 in batch chlorinators.

(Amendment prepared to discontinue air blowing)

Maintenance

Technical Services

Prepare project to scrub air-blow. (April)
(will hold pending reduction noted in off-gas project)

(Amendment prepared to discontinue air blowing)

SETTLING & SEWER MUST FUNCTION PER DESIGN

Production

Daily inspection of basins (In progress)

(In progress)

Maintenance

Project 2422 - Install PCB level alarm in North Settling Basin (March)

(Complete)

Technical Services

Get PCB level probes working in North Settling Basin and in off-gas storage tanks. (NOT DONE) (March)

Develop technique to reduce PCB content in tank car washes to ≃400 ppb. (LAB WORK COMPLETE - FINAL ANALYSIS [illegible]) (March)

Modify basin to effect more efficient skimming. (March-April)

(NO ALTERATION REQUIRED - COMPLETE)

Modify South basin to lower the level. (March-April)

(TO REMOVE 2" INCH - ORDER IN)

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CONTAIN PHYSICAL LOSSES

Production

Maintenance

Complete Project 3500 "Repair Sewer at 2nd Street". (5/15)
(IN PROGRESS)

Project 3694 "Extend pad at truck loading dock." (3/10)
(COMPLETE)

Technical Services

Premise for containment at loading docks. (April-May)
(NOT DONE)

Premise for automatic cut-off during loading of tank cars. (April-May)
(NOT DONE)

EXTRAS

Production

Drip pan - bucket- drum color procedural emphasis (IN EFFECT) (March-April)

Water off in-line power factor analyzer (COMPLETE) (February)

Altering procedure of clean-up (less water, more physical pick-up). (IN EFFECT) (In progress)

Maintenance

Replace city water break tank (COMPLETE) (3/3)

Pump Shop project (COMPLETE) (3/15)

Maintenance man inspects all pumps on monthly baiss. (2) (In progress)

Monitor project (4/1)

(INSTALLED BUT NOT DEMONSTRATED)

Technical Services

Verify accuracy of laboratory method (STUDY COMPLETE) (February)

REPORT ISSUED RANGE (35 - 128%)

Define specific sampling procedure (DEFINED TO GO FLIP-FLOP) (March)

Select pump and define future sampling program (March)

(SELECTED FLIP-FLOP
FUTURE PROGRAM FOR SAMPLING DEFINED)

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Edf 5/2/72