

Monsanto

FROM (NAME & LOCATION)

J. C. Landwehr - Anniston Plant

DATE : February 2, 1971

SUBJECT : AROCLOR REMOVAL FROM WASTE WATER

REFERENCE :

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The attached R & D Report (446-514, No. 1) is the first formal issue of Anniston data on Aroclor removal from waste water. This covers a filtration-adsorption experiment that lead to the pilot adsorption and pilot clarification studies listed under the report's Future Work Section. We are developing capital and operating cost estimates on the alternates being studied, and expect that differing situations will require one or another, or combinations of techniques. For example, filtration may be applicable only under limited conditions because of blinding and probably costs for cleanout of a commercial unit. It seems now that continuous clarification following adsorption on solids inherently present or added to a waste stream is most generally applicable.

Where stream flow is within a reasonable range and solids content is low, conventional carbon adsorption has promise. Studies just completed indicate flow rates and carbon capacity for Aroclors are in an economical range. This data will be published as soon as design and cost parameters are received from co-operating vendors. Carbon adsorption following clarification would be the system with greatest assurance of removal to no detectable amount by present analytical techniques.

At the other end of the spectrum sumps, limestone pits, and solids settling pits are adequate down to the 100-300 ppb level. Attachment 2 shows results and cost of pumping sludge from an Anniston settling pit.

Clarification experiments started February 1. The attached report from Betz Laboratories (Attachment 3) describes the flocculation system that will be initially used. Results on jar test samples indicate very good removal of Aroclors upon clarification.

Attachment 4 is a revised PR&D work plan which summarizes status on the work and dates for future phases to complete the program.


J. C. Landwehr

:kd
Attachments (4)

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