

INTEROFFICE COMMUNICATION

Westlake, Louisiana
August 5, 1969

TO: Mr. K. R. Gerhart - Saddle Brook

SUBJECT: Environmental Health Report
Continental VCM Plant, July 1969

Enclosed is a list of the environmental health activities at the Vinyl Chloride Monomer Plant during July 1969.

Status of Active Budgeted Items

V-1 Revision to Plant Effluent System.

Water Waste Disposal System. The remaining major items were placed on order. These included the stripper, agitator, control valves and desuperheater. The drawings of the pits were completed, a bid package was prepared, and the pit(s) installation is out for bids. Piping drawings of the stripping system will be started in August. The critical path item is still the neutralization tank with delivery still scheduled for mid-November.

C-500 Vent Stack Extension. Delays in the wood shipment were experienced due to late submittal of vendor prints. Upon review of vendor drawings, it was determined that the stack base was inadequately designed. This is currently being resolved with the vendor and should allow delivery of other wood sections by the end of August.

V-4 Tank Car Vent Recovery System.

Major vessels were installed. Delays in piping construction are being experienced due to lack of plant personnel who are preparing for the upcoming plant turnaround.

V-8 Low Pressure Condensate Recovery System.

Process engineering design has been completed. The process writeup will be completed in August.

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Current Developments

The biodegradation of ethylene dichloride was successfully demonstrated in the laboratory. Plant effluent samples in buffered solutions, as well as agitated clam shell solution, showed biodegradation. This has been successfully accomplished with acclimated seeds which will biodegrade EDC. Data are being tabulated and have formed the basis of the proposed secondary waste water treatment system.

Preliminary engineering and sizing of the secondary system was completed. The basic design provides a five-day basin separated into three sections; an equalization and neutralization section, an aeration-biological degradation section, and the outfall section. A preliminary report was issued and formed the basis for planning and estimating on this project for next year's budget (see attachment).

This system was reviewed by R. C. Allred of Ponca City who agreed with the design basis. Planning Section personnel were on the site to coordinate activities with the VCM Plant personnel for inclusion of the secondary system in next year's budget. A surveying team was also in Lake Charles for detailed site layout and elevations.

The toxicity tests for fish in water contaminated with ethylene dichloride show that the mean toxicity level is between 200 and 400 ppm. Further testing will be conducted using actual plant effluent.

Monsanto Biodize Company was given a contract to analyze the plant effluent and to prepare an estimate for a commercial plant to reduce the level of contaminants in the plant effluent to an acceptable level. This will give us a comparative cost for evaluating the economics of our proposed system. It will also confirm the technical feasibility of biologically degrading EDC.

The State Stream Control questionnaire was answered and returned to the State.


L. N. Vernon

LNV-MC

cc: DKP

RHG

PMW

ELL

Each w/attachment

CCR 000060486

Environmental Health Activities--VCM Plant

