

cc: Messrs. J. M. Avery
S. M. Blitt
R. A. Kehoe
G. F. Kirby
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R. K. Scale
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P. E. Weimer

CONTACT REPORT

Subject: Telephone Conversation with
Mr. DeFrance Clarke, Assistant Manager,
Fine Chemicals Division,
Union Carbide Chemicals Company
New York, New York

January 3, 1958

Purpose of Call

A call was made to Mr. Clarke for the purpose of:

1. Checking the status of Carbide's work on preparing a quotation for supplying us with organomanganese compounds.
2. Informing Carbide that Ethyl's patents claiming AP-3 and AP-50 as compositions of matter have issued.

Status of Carbide's Work

Mr. Clarke indicated that Carbide is nearly ready to discuss their proposition for supplying us with organomanganese compounds. He indicated that he might like to visit with us in Baton Rouge the latter part of the week of January 13 if their studies are completed. I told him that this would be satisfactory with us and we should be glad to discuss their studies with them at that time.

Mr. Clarke said that Carbide is still only in the laboratory scale in the production of AK-33X-type compounds. They are still hesitant to send us samples for testing because they are not sure they are yet producing compounds which will be representative of their commercial product. He said he would check with his organization to confirm this. If he found they were further advanced, he would send us a sample.

Toxicological Properties of AK-33X

Mr. Clarke asked if we were concerned over the toxicological properties of AK-33X. I told him that we had at least another two years of work to do before we could set quantitative standards for tolerable limits on AK-33X compounds. However, preliminary studies completed by Dr. Kehoe have indicated that the materials should be no more hazardous than tetraethyllead and that their toxicity should not constitute a barrier to our marketing them.

Mr. Clarke said his concern stemmed from the fact that data which Carbide had accumulated showed that inhalation of 100 parts per million of the MCP derivative (AP-3) killed six out of six test animals. He said that he did not have a good datum plane with which to compare this, but that the data caused him some concern. He said he thought that these data had already been sent to Dr. Kehoe. He will check with his organization to see that they are if they have not already been sent.

Status of Our Program

In response to Mr. Clarke's questions, I repeated for him the status of our program. I informed him that we are still on schedule on our market survey and application studies and that our process development program is still geared to commercialization in early 1960. I told him we were still open-minded on the relative merits of the CP and the MCP derivatives. We are engaged in application studies on both compounds, and it is still too early to tell which is preferred from the overall standpoint of effectiveness, digestibility in the engine, and availability of raw materials.

Mr. Clarke asked when our management was going to make its decision on whether or not we wanted to market our new antiknock. I told him we had already crossed this hurdle and that we are planning to sell it if a market is developed.

Ethyl's Patents

I informed Mr. Clarke that Ethyl's patents, Numbers 2818416 and 2818417, claiming AP-3 and AP-30 as compositions of matter have issued. I agreed to send him a copy of each of these patents as soon as they are received. 2818416 claims broadly cyclo-pentadienyl metal compounds of a rare gas structure. 2818417 claims AP-3 and AP-30 specifically.

P. A. McKim

PAM/gm
1-7-58