Monsanto

FROM (NAME & LOCATION) H. S. Bergen

DATE November 6, 1968

SUBJECT BIPHENYL FROM BY PRODUCT NAPHTHALENE BXT OPERATIONS PLASTICIZER AROCLOR FROM THIS BIPHENYL

REFERENCE

TO : W. A. Kuhn

CC:

D. A. Olson	DOLSO
W. R. Richard	WRICH
W. Waychoff	WWAYC
~~A. L. Klemm~~	~~AKLEM~~
E. S. Robson	EROBS

HSB
I talked to Dave last wk. - lets discuss further
AK.

On October 28, we met with Ernie Robson and Armin Kelmm on the subject of Dow's decision to recover biphenyl which exists in one of their petroleum streams from converted toluene to benzene. Apparently, Dow's economics indicate that they feel they can do this more profitably than by buying biphenyl from Monsanto at approximately 9-1/2¢ a pound. There is apparently a debate within Dow on this subject, but they have decided to go ahead with it and we will not know for approximately another nine months as to whether they are successful or not.

Since several companies are indicating an interest in making biphenyl from these by-product sources, it is necessary that we reexamine our previous estimates of manufacturing costs of biphenyl from these sources. I don't recall exactly, Bill, who did the work, but I think Des Hosmer would know and I think that we should have these updated in view of more recent trends and conditions. Certainly it is also an alternative plan that we could utilize in a further biphenyl expansion of our own facilities which we might want to undertake at Chocolate Bayou to utilize the biphenyl in our petroleum napthalene stream. We also have the suggested program from Ashland on a joint venture. When you consider that some of these streams are up to 50% rich in biphenyl, it may be that our previous estimates were not correct.

Another facet of this problem is one of quality and whether technically Aroclor can be made from this biphenyl which will be comparable for electrical purposes and for plasticizer purposes. As we recall, our past work indicated that we could not make good electrical grade Aroclor, but the question remains whether suitable plasticizer grade Aroclor could be made. We certainly know that Koppers has made Aroclor in the past from a crude biphenyl and while it was dark in color, it has found usage in some accounts. The question was raised as to whether a suitable material for National Cash Register could be made from this biphenyl. Also the question was raised as to whether we are now selling Aroclor 5060 or 5460 to Sun (business previously held by Koppers or some other competitor.) Can Walt Waychoff advise on this question?

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Would you please review these projects and questions and get help from Bill Richard and others in Research, if necessary, on the quality problems.

As a target date, we should have a review of this by the first of the year.

H. S. Bergen

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