

Exhibit 27



Chevron Chemical Company

ATHO DIVISION Office of the Vice President & General Manager			
SEP 23 '77			
To	Note	Handle	Comment
DBB			
GGB			
HMC			
MSC			
DPH			
LH			
RKK			
WFM			
JDM			
JNO			
MMR			
DFS			
ELS			
FILE			

Richmond, California
September 21, 1977

PARAQUAT TOXICOLOGY REQUIREMENTS -
PPD - CHEVRON LIAISON

CONFIDENTIAL

D. B. BARLOW:

The purpose of this memo is to summarize discussions with PPD on the above subject during our August meetings and to make recommendations relative to protocols and payment for necessary work.

As you are well aware, the Paraquat rat toxicology study is subject to great criticism since it was performed for PPD by IBT. We have further learned that there is no raw data available from IBT on this study, and therefore this study must be considered of little value either in support of our current tolerances or for future reregistration.

The mouse oncogenic study, however, was performed by CTL and we were hopeful that documentation and procedures used in this study would be significantly better and permit use of this as a valid oncogenic study. We have learned from CTL that this study cannot be adequately validated and supported under current "good laboratory practices." For all practical purposes, the audit of the CTL study is essentially as poor as was the audit of the IBT study.

The result of the above situations leaves us in a status in which we have no defensible oncogenic studies to use in support of Paraquat registrations. It is thus critical that new studies be initiated as soon as possible so as to have them available in defense of our current registrations as well as reregistration and additional tolerances. It is also critical from our point of view that these new studies must be done by protocols which would be acceptable to EPA.

These studies will undoubtedly be required in defense of current registrations and for further reregistration requirements in all of the sophisticated countries of the world in which Paraquat is now tolerated and labeled. The requirement for these studies, in our opinion, is worldwide and is not limited specifically to U.S. EPA. Furthermore, inadequacies of the current studies are not a responsibility of Chevron, but are due to the poor lab practices employed both by IBT and by CTL.

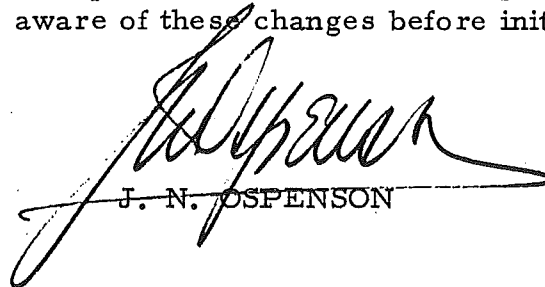
We have previously questioned whether the 50/50 sharing of payment for these studies was in truth a fair distribution of cost in view of the fact that Chevron represents considerably less than 50% of the total Paraquat

700760

Case ID: 220300429
Control No.: 26064959
CHEV-SJ0049513

worldwide market. Ultimately we reluctantly agreed to a 50/50 sharing based upon cost estimates for the studies supplied by PPD. We were informed at the recent meetings that they have modified their protocols significantly and that the cost for these studies have gone up by 60% or more. Thus, their current estimate for the rat study alone is over \$350,000. This cost seems excessively high and is almost twice the cost of the rat study that we are having done on ORTHENE. We have requested details of their revised protocols and cost estimates and our Environmental Health group is currently reviewing this information. In view of these large cost increases, we informed PPD that we would have to discuss this situation further with our management before we would authorize starting these studies.

In view of the above overall situation, it is again recommended that we reconsider what part if any of the replacement toxicology costs we wish to share with PPD. This is purely a business decision, and should not effect the overall liaison between our groups to insure that the tests are performed in a manner which would make them suitable for worldwide registration purposes. However, since the cost factor did come up in the discussions in England, it is probably critical that a management decision relative to any possible change from our previous policy should be made as quickly as possible so that they would be aware of these changes before initiating the studies.



J. N. JOSEPHSON

JNO:jb

cc: H. G. Franke
L. R. Stelzer
E. L. Stripling, Jr.
C. R. Tanner

700761