

②

NHJ

①

BVI - please see me

in 1549

CHEVRON CHEMICAL COMPANY
ORTHO DIVISION
RESEARCH AND DEVELOPMENT DEPARTMENT
RICHMOND, CALIFORNIA

CONFIDENTIAL

MEETING REPORT:
ORTHO R&D COORDINATING COMMITTEE
MEETING MINUTES

FILE NO: 700.411
DATE: AUGUST 27, 1976

In attendance were J. Abell, D. B. Barlow, A. V. Dearman, D. F. Dye (for L. R. Stelzer), H. G. Franke, L. Hopkins, J. D. Mason (for O. R. Vasak), J. N. Ospenson and B. F. Quisenberry.

Underlinings indicate responsibilities for action.

OLD BUSINESS

All items identified for action at the July 23 meeting have been, or are being, handled.

AGENDA ITEMS

1. ORTHENE

Mason reported that the ORTHENE Plant (6 M lb/yr) should be mechanically completed by October 15 and is scheduled to come onstream by November 1, 1976. The incinerator modifications should be completed October 1. There still has not been any decision by top management on the location for the next ORTHENE-MONITOR Plant. A plan has been proposed to Dr. Kent to modify the 6 M lb. Plant to increase the capacity to 12 M lbs. Dr. Kent has approved of this plan and this recommendation will move forward to the Corporation.

Abell discussed ORTHENE stability. He noted that the '76 product was less stable than some of the earlier product as ORTHENE manufactured after March was degrading at the rate of about 10 to 15% per year. Operating records are being reviewed to try to determine the cause of this instability. There are approximately 750,000 lbs. of ORTHENE active, which is in the 75 S and 85 technical forms. At the present time, we do not know which is stable and which is the less stable product. All material will have to be analyzed prior to shipments.

Dearman reported that some of their customers had indicated a caking problem with the ORTHENE technical. This caking problem was inconsistent and varied with batches. Mason commented that crystal size is important and that they should try to obtain large crystals to reduce the caking problem.

Mason reviewed the results of the meeting held by Chevron with EPA Region IX representatives to discuss the conversion of incinerator waste to fertilizer. The EPA people were favorably impressed, saw no apparent problems and indicated that our current plans are adequate.

Barlow inquired about the synthetic pyrethroids. Dearman advised him that Sumitomo had 25,000 lbs. being sold in Asia and FMC had 15,000 lbs. being sold in South America. Both of these chemicals are controlling diamondback moths and bollworm and are looking very interesting. Dearman will develop information regarding the selling price in these areas. He also commented that ICI Australia has 15 synthetic pyrethroids that they are testing and trying to reduce to 3 which will be tested in the U.S. in 1977.

Quisenberry said that the ORTHENE field program is going as planned and that the control is as expected. Also, Marketing is getting more interested in ORTHENE.

Dearman said that the International field program for ORTHENE is pretty much on schedule. There are no Red Flags at this time.

Abell reported work being done on formulations that would prevent ORTHENE from entering the leaf and would hold the ORTHENE on the leaf surfaces instead. PR&S is continuing to work on development of an incapsulated ORTHENE. At the present time, they have a product that has been sent for field testing. The granules, however, are fairly large and are not sprayable.

Mason reported that the development work on the new MONITOR acetylation program will be completed by January, 1977. After that, Chevron Research Corporation will need three months to complete the design. Construction can be started the 1st of May. Barlow requested that Research look into adding another shift to work on the development of the ORTHENE process to shorten time required to complete the development. It was agreed that Research would look into the possibility of this and the cost.

2. BOLERO

Quisenberry reviewed the results of this year's work in California. The performance looks good and compared very well with Ordram. Based on the results from this year's trials, the Marketing people are showing more interest in BOLERO.

Franke indicated that the metabolism work on unknowns "A" and "B" is continuing.

Dearman said the International program is on schedule. They still have some work to finish up in Mexico. They are not anticipating a registration in Mexico until the U.S. registration is issued; however, registrations in some of the other countries are proceeding.

PR&S reported that they can make a 20% granule on the same carrier as the 10%. They are also working on a 40% granular using a different carrier. These higher concentrations look promising and could reduce cost. Samples will be sent to the field for testing.

The tolerance petition is still under EPA review. We hope to hear something definite on it by the end of September.

3. Paraquat/Diquat

Dye discussed the status of the candidate RPAR Review for Paraquat. He advised that the review had not yet been started as EPA is quite a bit off of their original schedule. Additional information has been submitted to EPA, which we feel will help our position in the review, and may prevent it from going to formal RPAR status.

Franke said that the animal residue and metabolism studies were all on schedule.

Mason said that the solid Paraquat continues to look very promising. Packaging may be somewhat of a problem, however, since the packaging will have to be free-standing to prevent caking of the product. ICI is ahead of us time-wise in process development. Our process, however, will be simpler to scale-up and our product will be less dusty, which is an important consideration. Ospenson requested Abell to decide on one product to go to the field.

Ospenson reported on the work by ICI on an emetic formulation. He said that he thought they were planning to be on the market in the UK with an emetic product by early 1977. The political implications of this in the U.S., if we are not in a position to follow suit, could be rather serious. Ospenson will follow up on this during his visit in early September to ICI.

The petition status of Diquat water tolerances was discussed briefly. The possibility of the tolerance being established but with EPA restricting the use to just the U.S. Army Corps of Engineers was explained.

4. RE-19790

Franke stated that the process development is progressing very well. Du Pont was contacted regarding the nitrocyclohexane intermediate and they advised the price would be \$.75 to \$1.00 per pound for 1 M lb. quantities. Ospenson requested that all of the information on 19790 be pulled together for his meeting in October with Mr. Barlow to review the 1977 program. Stelzer is to schedule an early October R&D meeting to review all aspects of the development PERT Chart.

Mason said that he had obtained a Standard ^{for} Research Institute Report on Du Pont's process. He felt we could use a less pure product which would be less expensive based on the SRI report.

3011
Franke reported that the residues are very stable in soil and in plants. Ospenson requested that Franke work with A. A. Whipp to get additional field information on the residues.

Quisenberry reported that FR&S had difficulty this year in developing information on the performance of 19790 due to bad formulations. There were a lot of problems with plugging nozzles, etc. However, the results obtained indicate that 1½ to 2 lbs. 19790 equals the standard rate of atrazine on corn and the standard rate of lasso on soybeans. On sorghum, 1 to 1½ lbs. of 19790 plus propazine or atrazine looks very promising, but the market potential on sorghum is not very well identified as yet; 19790 performed better on sorghum in 1976 than 1975. On corn and soybeans, the results were equal to last year.

Dearman reported that International will not be able to use 19790 on transplanted rice, wheat, etc., due to extreme phytotoxicity.

Abell reported that they are looking at several wetttable formulations, and have two different 2 E formulations.

A date for the next Committee meeting was not set. However, should a meeting be necessary, it will be held on the 24th of September. There being no further business, this meeting was adjourned.

Recorded by,


D. F. DYE

cc: J. Abell
D. B. Barlow
A. V. Dearman
H. G. Franke
G. R. Hawkes
L. A. Hillmann
L. Hopkins
J. N. Ospenson
B. F. Quisenberry
C. R. Redus
L. R. Stelzer
C. R. Tanner
W. G. Toland
O. R. Vasak