

Exhibit 52

Richmond, California
May 21, 1975

VISIT TO ICI UNITED STATES, INC.
File No: 721.5/Paraquat
X. File: 771.1996

D. B. BARLOW:

Your memo of May 16, 1975, asked for our comments on Mr. R. C. Hampel's letter of May 12, 1975, with regard to the X-77/surfactant situation.

We did have a supply problem with X-77 last year but as we understand the present situation, there is no problem and none is anticipated.

We considered the possibility of registering a paraquat product containing a surfactant but this now appears very undesirable due to increased toxicity. A copy of L. R. Stelzer's letter of May 14, 1975, on this subject is attached.

As to being a supplier of surfactants, ICI United States is currently one of our major suppliers of emulsifiers with their Atlox 3403F, 3404F and 3409F.

The question of becoming a supplier of adjuvants is more difficult. It would probably be necessary for them to do any required field work. The effects of adjuvants in the field are often subtle and may require extensive testing to establish. For us to do any field work some of our current work would have to be displaced and it is unlikely that this could be justified.

It is our understanding that the comments which you will receive from Marketing will cover the adjuvant situation in some detail. If you have further comments from Research, please advise.

J. N. Ospenson
J. N. OSPENSON

JA:jm

Attachment

Case ID: 220300429
Control No.: 26064959
SYNG-PQ-01845630

Richmond, California
May 21, 1975

VISIT TO ICI UNITED STATES, INC.
File No: 721.5/Paraquat
X. File: 771.1996

D. B. BARLOW:

Your memo of May 16, 1975, asked for our comments on Mr. R. C. Hampel's letter of May 12, 1975, with regard to the X-77/surfactant situation.

We did have a supply problem with X-77 last year but as we understand the present situation, there is no problem and none is anticipated.

We considered the possibility of registering a paraquat product containing a surfactant but this now appears very undesirable due to increased toxicity. A copy of L. R. Stelzer's letter of May 14, 1975, on this subject is attached.

As to being a supplier of surfactants, ICI United States is currently one of our major suppliers of emulsifiers with their Atlox 3403F, 3404F and 3409F.

The question of becoming a supplier of adjuvants is more difficult. It would probably be necessary for them to do any required field work. The effects of adjuvants in the field are often subtle and may require extensive tests to establish. For us to do any field work some of our current work would have to be displaced and it is unlikely that this could be justified.

It is our understanding that the comments which you will receive from Marketing will cover the adjuvant situation in some detail. If you wish any further comments from Research, please advise.

J. N. Ospenson
J. N. OSPENSON

JA:jm

Attachment

MR. J. N. OSPENSON:
MR. M. E. WIERENGA:

DBB
5/16/75

File	Hdle
✓	J. A. Espenson
	J. A. ...
	A. V. Pearson
	H. G. F. Ke
	G. R. Hawkes
	L. ...
	W. A. ...
	D. F. ...
	L. R. ...
	C. R. ...

MAY 15 1975

DBB



ICI United States Inc.

WILMINGTON, DELAWARE 19897
(302) 658-9311

RONALD C. HAMPEL
Vice President
General Manager
Agricultural Chemicals Division

12 May 1975

Mr. David B. Barlow
Vice President and General Manager
Ortho Division
CHEVRON CHEMICAL COMPANY
200 Bush Street
San Francisco, California 94104

721.5 Pg
771.1996 PgCL

Dear Dave:

YOUR VISIT TO WILMINGTON

This is to confirm that we are very much looking forward to seeing you here on June 5 and 6. A car will meet your United Flight 60 at the Philadelphia Airport at 4:35 P.M. and will bring you directly to our home; Jane would be very upset if you stayed in a hotel in Wilmington, and she is very anxious to see you here. That evening (June 5) Bob Barnett is giving a dinner for you to celebrate the signing of the paraquat agreement and the commencement of the new ICI United States/Chevron relationship. Included amongst the guests will be Dr. Alf Spinks, an ICI Main Board Director who, besides other things, is the ICI Pharmaceuticals Product Director and the ICI Research Director and sits on the Plant Protection Policy Group which monitors the ICI crop protection business performance worldwide; Mr. Ken Wattman, the Group Vice President in ICI U.S. in whose area of responsibility are the Specialty Chemicals Division and therefore the ICI U.S. surfactant business; and Mr. Alan Bates, who, as I told you yesterday, succeeds me on July first as a Vice President of ICI United States and General Manager of the Agricultural Chemicals Division.

On Friday, the sixth, in the morning (after some exercise) I thought we could usefully have some general discussions ourselves about the future of the ICI U.S./Chevron relationship and also introduce you to those people in the Specialty Chemicals Division who are specifically responsible for the agricultural surfactant business. I know that your people were dissatisfied with the supply position on X-77 last year and have been pursuing with PPD the possibility of the registration of paraquat with wetter included. The Specialty Chemicals Division people here are very interested not only in supplying a wetter for sale with paraquat but also in establishing a relationship with your company as a supplier of surfactants and adjuvants generally. *

After lunch there are some differing possibilities for your departure for The Greenbrier about which my secretary will be speaking to yours. I am sorry that ICI does not have its own private plane, but we could arrange to charter one for you!

Mr. David B. Barlow

12 May 1975

We are certainly looking forward to seeing you here in
Wilmington.

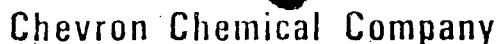
With kindest regards,

Yours sincerely,



R. C. Hampel

RCH:AMV



Richmond, California
May 13, 1975
(Revised May 14, 1975)

PARAQUAT PLUS SURFACTANT

File No: 771.1996

X. File: 721.5

J. N. OSPENSON:

Marketing has requested that we study the possibility of registering with EPA a paraquat product with built-in surfactant. Our initial approach has been to work with PPD towards collecting the data necessary to register their export formula (JF1682) which contains 10% surface active agents. PPD has now supplied nearly all the information originally requested; the acute toxicology data for dermal LD₅₀, eye irritation and skin irritation are said to be soon ready. However, a Red Flag concerning oral toxicity has now come to light and I recommend we defer all plans to register and market a paraquat + surfactant product.

PPD has given us a female rat acute oral LD₅₀ on JF1682 of 693 mg/kg (138 mg ion/kg). Data on our current U.S. product indicate rat oral LD₅₀'s between 100 - 150 mg ion/kg so that the value on JF1682 appears in the same range. Rose, et. al. 1974, have published data showing 93% mortality in male rats dosed with pure paraquat dichloride at 126 mg ion/kg with first mortalities (38%) occurring at day three. These data on rat indicate no great difference in acute oral toxicity or time to death between product with surfactant vs pure paraquat. However, R. D. Cavalli has informed me that CTL has unpublished data on dogs showing that the addition of surfactant to paraquat increases the rate of, and degree of, absorption from the gut into the blood; mortality is also increased.

For some time now, we have recognized that speed of medical treatment is an important factor in the treatment of paraquat poisonings by ingestion. The addition of surfactant appears to make a bad situation worse.

Unless PPD can produce data to contradict the above, I strongly recommend we discontinue the exercise toward registering a product with built-in surfactant. Further, we should insist that PPD supply our U. S. product with no surfactant. Please advise.

L. R. STELZER

LRS:jm

cc: J. Abell
R. D. Cavalli
H. G. Franke

B. F. Quisenberry
C. R. Tanner
R. T. Wallace

Case ID: 220300429
Control No.: 26064959

SYNG-PO-01845625